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**DOE's FISCAL YEAR 1995 BUDGET**

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DOE's Fiscal Year 1995 Budget, Seri...

**HEARING**

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER

OF THE

COMMITTEE ON

ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

SECOND SESSION

MARCH 8, 1994

**Serial No. 103-114**

Printed for the use of the Committee on Energy and Commerce



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## DOE's Fiscal Year 1995 Budget

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TUESDAY, MARCH 8, 1994

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON ENERGY AND COMMERCE,  
SUBCOMMITTEE ON ENERGY AND POWER,  
*Washington, DC.*

The subcommittee met, pursuant to notice, at 10 a.m., in room 2123, Rayburn House Office Building, Hon. Philip R. Sharp (chairman) presiding.

Mr. SHARP. The subcommittee will please come to order.

I am very pleased today to welcome the Energy Secretary Hazel O'Leary to discuss the administration's fiscal year 1995 budget request for the Department of Energy.

I must say that I am very pleased with the new direction the Secretary and the administration are taking with our national energy budget. I think first it must be recognized that the President and the Secretary in their proposal are following what they said they would do last year and what the Congress agreed to, which is to cut expenditures, and this bill has an absolute cut in the amount of money that will be available for the programs run by the Department of some 2.6 percent. This is not cuts from curves and increases, this is for real, and it is critical, obviously, in the fiscal climate that we must deal with the Federal deficit.

But I particularly also want to compliment the Department and the Secretary because, in the process of actually cutting, they have also tried to recognize that there needed to be changes in the priorities of the way in which Government funds are spent, and while they are dealing with burgeoning problems of cleanup to the Government facilities that need environmental cleanup, an enormous future drain on the resources of the taxpayer, the fact is that they have also focused on some critical changes in energy policy that many of us have been advocating for some years.

So I am pleased with the new emphasis on conservation and renewables and particularly compliment the Secretary and the Department for leading within the administration on trying to get the Federal Government to become a more responsible energy user since, probably now that the Soviet Government has gone, the U.S. Government is probably the largest single energy user anywhere in the world and has a duty to us as taxpayers to use that energy as efficiently as possible, and we all know there are many major tax savings over time for the country if we can carry that out.

I wanted to mention very briefly the Strategic Petroleum Reserve and will be asking the Secretary about that. Many of us have felt that was a central policy on a bipartisan basis for protection of the

country, and indeed the western economies, in times of an emergency, an oil emergency, and of course we have a major reserve in place, but we had anticipated going forward with that.

The previous administration and this administration and the Congress have found that to fund that, given other priorities of deficit reduction and other needs in the country, has become next to impossible to keep up the pace that many of us had wanted, and regrettably the Congress 2 years ago, and the Bush administration leading the way, refused to engage in a requirement that the oil industry set aside so much oil, which was comparable to a very small tax that would have had a very slight impact, almost negligible on the price of energy in the country, but would have guaranteed us a substantial reserve.

In the absence of that funding mechanism that clearly could not win support in the House of Representatives or in the Senate when Senator Johnston sought support for it—or with the White House it did not win support—we are left, frankly, with this policy being put on the back burner for fiscal reasons. I think that is regrettable, but in the face of a funding policy for that program alone, I don't see that there are very many realistic alternatives.

At some point I do want to ask the Secretary about the Low-Income Energy Assistance Program, which is not technically in her budget, but from a policy-wise perspective, it is relevant and we will get to that question later.

Madam Secretary, you have drawn criticism as the want of anybody who is willing to make decisions by trying to get us new priorities, and naturally those people who felt that they wanted their things funded are upset in various quarters around the Congress, and I want to particularly emphasize that some of us are not upset, some of us want to cheer you on in this effort, and we will do so in the appropriating process as this goes forward.

Let me now recognize my distinguished colleague from Oklahoma, Mr. Synar.

Mr. SYNAR. Thank you, Phil, and let me join that cheerleading squad because this is one member who thinks that the changes are for the better.

I am particularly grateful, Madam Secretary, for 42 percent increase in funding for conservation and energy efficiency programs. I am pleased with the increased funding for oil and natural gas R&D and alternative fuels, something that is long overdue and I think sends the right message about the new direction we want to take, and so I join with Phil to say I hope you will stand up to your critics on the budget and fight for your funding priorities because I think overall they are very good.

That said, I hope that sometime during the remarks today or questions and answers, we can talk about something that is really happening out here, and that is the economic situation with the domestic oil and gas industry. It is beyond serious, and I would like to know what your thoughts are on the impact it is going to have both economically, environmentally, that we are losing 2 million barrels a day or more in marginal well production.

I would announce that we are going to—our Subcommittee on Environment, Energy, and Natural Resources—explore this in great depth, and I look forward to working with Phil and yourself



on this because we are going to have to do something, either make a decision that we are going to write that industry off or we are going to take the necessary steps to ensure that there is a domestic energy business in our country. So I look forward to your comments on that.

But stay the course on this budget. Stay the course.

Secretary O'LEARY. Yes, sir.

Mr. SYNAR. You made the right decision. So thank you.

Thank you, Mr. Chairman.

Mr. SHARP. Thank you, Mr. Synar.

I might say, without objection, Mr. Moorhead's opening statement that we have been given will be part of the record, as will those of Mr. Bilirakis and other members of the committee.

[The opening statements of Messrs. Philip R. Sharp, Edward J. Markey, Gary A. Franks, Michael Bilirakis, Carlos J. Moorhead, and J. Dennis Hastert follow:]

#### OPENING STATEMENT OF HON. PHILIP R. SHARP

I am pleased today to welcome Energy Secretary Hazel O'Leary to discuss the administration's fiscal year 1995 budget request for the Department of Energy.

I, for one, am very pleased to see that the Department of Energy's fiscal year 1995 budget accomplishes two things. First, there is an absolute reduction in the total amount of spending for the Department. Second, it shifts priorities within the budget to better fund programs of immediate benefit to the economy.

The proposed decrease in DOE spending would be accomplished in part through initiating or completing certain program terminations such as the SP-100 space reactor, the Superconducting Super Collider, the Atomic Vapor Laser Isotope Separation technology, and the Advanced Liquid Metal Reactor (ALMR). In addition, the administration would continue a trend away from spending on DOE defense production to greater emphasis on civilian energy programs.

I want to commend the administration especially for its decision to finally terminate the ALMR technology. The ALMR has been criticized for being uneconomical, lacking environmental benefits, and raising serious concerns about nuclear proliferation. Last year the House voted on two occasions to terminate this program. I know the Secretary has been faced both with policy and political problems on the ALMR and I commend her deft and thoughtful evaluation.

Within the constraints of an overall decrease in its budget the DOE has managed to propose significant funding increases for high priority programs with the greatest potential return. Such programs include energy efficiency, renewables, natural gas, and other alternative fuels. Many of these programs will also contribute to the administration's Climate Change Action Plan and other environmental objectives, including the Energy Policy Act of 1992 (EPAct). Together, these initiatives will require a significant portion of the Department's budget request for fiscal year 1995. In order to ensure their implementation, increases for these high priority programs should be fully supported.

Since 1973, Americans have saved more energy through improved efficiency than all the increases in production of traditional sources of energy put together. This is why Congress made energy efficiency the centerpiece of the EPAct legislation. Energy efficiency and renewables can yield many benefits to the U.S. economy including decreasing our dependence on foreign oil, expanding export opportunities, creating jobs, and saving consumers billions of dollars a year.

I particularly want to mention the initiative to reduce energy spending by the Federal Government. This program has many benefits and I look forward to helping the Secretary pursue the Federal Energy Management Program.

I want to comment on the administration's proposal to change the financing system for DOE's High-level Radioactive Waste Program. Such a proposal will raise many important questions regarding level of expenditures, program management, compliance with budget requirements, and proper Congressional oversight.

The committee will carefully review this proposal once it is final and will take appropriate actions at that time.

In evaluating the administration's proposal for the Nuclear Waste Fund, we will keep in mind three objectives. I believe the first objective should be to ensure that an adequate amount of money can be made available for this program as increased

expenditures for it are required. The program is meant to be self-financing through utility contributions and as long as the industry continues to pay its share of the costs, they deserve an assurance that the necessary resources will be forthcoming.

The second objective should be to ensure that there is sound program management for the program. The issue is not simply how much money is being spent but also how well the money is being spent. Proper Congressional oversight will be part of the effort to maintain cost and quality controls over the program.

The third objective should be to ensure fiscal responsibility and to comply with the requirements of the Budget Act.

The Strategic Petroleum Reserve (SPR) is this Nation's insurance policy in the event of sudden oil supply and price disruptions. The fiscal year 1995 budget proposes to stop filling the SPR. This could mean two things: First, the SPR would stay at its current size (about 590 million barrels). Second, the recently constructed available SPR storage space (about 140 million barrels) may never get filled up.

While we have over \$300 million now available from previous years for oil purchases, the budget proposes to shift that over the next 3 years to pay for some of the SPR's ordinary operating, repair, maintenance and facility upgrading costs. The resulting lower requests for SPR operating costs mean that the \$300-plus million now available to buy oil is, in effect, being diverted to deficit reduction.

This may be a wise policy, but I look forward to DOE's broad policy review of how large the SPR should be and how and when it should be used. Until then, however, I am in reluctant agreement with this deficit-cutting course.

In respect to clean coal technologies I would like to also express my support for the shift in emphasis in the DOE's budget to commercialization of technologies that have been developed. It is time we strengthen our ability to get innovations out of the laboratories and into the marketplace. The administration's export initiative in this area is especially valuable.

I know, Madam Secretary, that you are aware of the resolution authorized by myself and four original co-sponsors and 53 current additional co-sponsors urging the administration to shift its spending priorities toward energy efficiency and renewable energy programs. H. Con. Res. 188, for which additional co-sponsors are still being sought on the Hill, has wide-spread support in energy and environmental communities. I am pleased to see the Department take the lead and look forward to working closely with you to achieve these ends.

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#### OPENING STATEMENT OF HON. EDWARD J. MARKEY

Thank you, Mr. Chairman and good morning, Secretary O'Leary. Madam Secretary, the previous year has been a tremendous year for both you and your Department of Energy. As the first Secretary of Energy since the beginning of the post-Cold War era, you have been presented with the daunting task of fundamentally reinventing your Agency. As the entire U.S. Government must come to terms with the realities of shrinking budgets and new post-Cold War challenges, the DOE must also be prepared to change with the times. You have taken this task head-on in your first year as Secretary, by beginning to shift the focus of your Department away from its Cold War, nuclear-dominated agenda, toward one that is greener, leaner, and more open.

I am certain that this change in the DOE's priorities must, at least in part, stem from your background and experience. Consistent with the Department's historic preoccupation with its nuclear weapons production responsibilities, nearly all of the previous Secretaries of Energy have been more or less children of the national security establishment. However, you, as a former chief of Northern States Power, have brought a brand new direction of leadership to the DOE.

In fact, your appointment alone was somewhat revolutionary. In a 1992 interview, former energy undersecretary John Tuck admitted that former Secretary James Watkins had actually been President Bush's second choice to lead the DOE. Bush's first choice, Tuck said, was merely "some Midwest electricity guy." Apparently, Bush withdrew that "Midwest electricity guy's" name from consideration after he was told that, at that time, the Energy Department really had nothing to do with energy at all. In reality, Watkins was selected to lead the task of rebuilding the DOE's crumbling weapons complex, which former undersecretary Tuck described as constituting the bulk of the DOE's responsibility. Tuck said that the DOE was 60 percent bomb factory and 40 percent research and development.

The fact that now, we have someone who could be described as a Midwest electricity woman sitting here before us as the Secretary of Energy, is indicative of the Clinton administration's priorities and of the evolution of the DOE in the post Cold War world. I applaud the President's wisdom in appointing you, and further ap-

plaud the efforts that you have made to begin to reinvent the Department of Energy.

On December 7, 1993, you unveiled your openness initiative for the Department of Energy, seeking to declassify information dealing with subjects such as: previously secret nuclear tests; the location and quantities of U.S. stockpiles of weapons-grade plutonium; and the gruesome issue of human radiation experiments. This truly revolutionary initiative demonstrated the administration's intention to move the Department of Energy from behind the veil of secrecy that dominated the Cold War into a new era of openness.

Likewise, the DOE's fiscal year 1995 budget request similarly proves the administration's commitment to shifting the DOE's priorities, not only away from the "60 percent bomb factory" that former undersecretary Tuck described, but also away from traditional DOE beneficiaries: fossil fuels and nuclear energy. The DOE's fiscal year 1995 budget request affirms that the Department has shifted its research and development priorities away from area such as coal and nuclear energy toward the advancement of clean energy supplies, increased efficiency, and greater environmental quality.

This year's budget contains a 43 percent increase in energy conservation programs. An effective DOE energy conservation program would help to clean up the environment, lower energy bills for businesses and families, and create jobs. Until recently, the DOE did not have the leadership to justify a spending increase of this size for energy efficiency. It is only within the last year that the situation has changed dramatically, not only in the DOE under your leadership, Secretary O'Leary, but also throughout the administration as a whole. The Clinton White House, led by Vice President Gore and the Office of Management and Budget, is also committed to making energy efficiency work and work right. What the administration is doing, for lack of a better word, is "reinventing" DOE's energy efficiency programs so that they are dynamic, well-run, and are responsive to the needs of policymakers, businesses, consumers, and taxpayers. However, it is important to remember that despite the increases in this budget proposal, conservation still represents about one quarter of DOE's spending on energy resources and only 5 percent of the DOE's overall budget.

Within the energy conservation budget, I am particularly pleased with the DOE's request for \$11 million to support the Department's research and development of lighting and appliance efficiency standards. This request represents an increase of 27 percent from last year's level, and is more than three times higher than the fiscal year 1993 level. There is perhaps no greater energy efficiency bargain for taxpayers than lighting and appliance standards. The small investment made in these tightened standards results in tremendous savings for consumers and businesses alike.

The Energy Policy Act set numerous minimum efficiency standards in statute, but also called upon the DOE to conduct research and examine rulemaking to explore the value of other new standards. Furthermore, in last Friday's Federal Register, the DOE announced a Notice of Proposed Rule Making on appliance efficiency standards which would strengthen the minimum efficiency standards on 8 consumer products that were originally set under the Energy Policy Act. As you know, Madam Secretary, Chairman Sharp and I have both worked hard on the issue of increasing the efficiency of lighting and appliances, and I applaud the DOE's recent decision. Madam Secretary, I strongly support programs aimed at increasing the efficiency of consumer and industrial products, and look forward to working with you on this issue in the near future.

In addition, the budget request also contains a 15 percent increase in funding for renewable energy programs above their fiscal year 1994 levels, including an increase of more than \$21.3 million in funding for wind energy systems and a \$48.6 million increase in funding for solar energy programs. These renewable energy programs will help us to develop the clean sources of energy which are the key to our energy future, and will encourage the growth of many small firms in the dynamic renewable energy R&D industry.

Small, innovative businesses, like those in the renewable energy industry are the engine that drives our Nation's economy forward. One of these companies, DMC, of Chelsea, Massachusetts, recently landed a \$300 million contract with Hydro Quebec of Canada to provide their energy efficient services to the Canadian market. This deal is of the largest export contracts ever signed between the United States and Canada. Companies like DMC, who export their energy know-how, are extremely important to America's long-term economic success, and it is because of increased DOE funding of efficient and renewable energy technology that businesses like these are able to gain their advantage.

While I am pleased with the overall new direction that the administration has proposed in this budget request, I unfortunately have strong objections to the ad-



ministration's strategy on low-income weatherization programs. While this doesn't fall entirely within the DOE's jurisdiction, I feel that it is appropriate to raise this matter as we discuss the DOE's budget for low-income weatherization.

Although the administration has proposed a \$43 million increase in the DOE's weatherization assistance program, they have also requested slashing the budget for the Low Income Home Energy Assistance Program in half. In 1993, approximately \$130 million of the LIHEAP budget was voluntarily channeled by the Nation's Governors into weatherization assistance. If LIHEAP is cut in half, then it is likely that little—if any—LIHEAP money will be available for weatherization programs. This essentially cuts by one third the amount of Federal investments in the energy efficiency of low-income housing. In addition, the deep cuts proposed to the LIHEAP program would prove tremendously damaging to a program that already turns away three quarters of eligible recipients due to inadequate funding. In the coming months, I look forward to working closely with Chairman Sharp on the issue of LIHEAP to resolve a number of the outstanding issues concerning the administration's proposed cuts so that low-income Americans are not unfairly left out in the cold in coming winters.

Secretary O'Leary, you have achieved quite a record of accomplishment in your first year in office. I am greatly encouraged by the new direction taken by the Department of Energy and look forward to working with you again in this coming year to achieve the ambitious goals outlined in this budget request.

#### OPENING STATEMENT OF HON. GARY A. FRANKS

Thank you Mr. Chairman for holding today's hearings. Madam Secretary, I noted that you testified yesterday before the House Energy and Water Development Appropriations Subcommittee that clean energy programs, environmental clean up programs, and pollution prevention will enjoy increased attention next year in the Department of Energy, not to mention they will enjoy more funding if the Appropriations Committee agrees with your testimony from yesterday. I agree with you that these are laudable goals for the Department of Energy to have. I think every one would like to see the United States, as well as the rest of the world become more energy efficient.

However, I am concerned about Department of Energy's "industrial competitiveness" partnerships. It sounds to me like a national industrial program by having the Government oversee the private industries research plans by buying into them with 50 percent promised capital towards the programs. What troubles me about this proposed plan is the notion that government-sponsored scientific programs should be applied with the ultimate intention of steering market decisions towards the goals of the Federal regulators.

While the Department of Energy thinks of their "industrial competitiveness" programs as part of a cost-cutting measure, industry thinks of it as a burden.

The Federal Government has spent more than \$50 billion taxpayer dollars to develop energy conservation technologies. Yet we have hardly anything to show for all of this taxpayer invested capital. In the last 12 years the Department of Energy has dedicated \$6 billion of taxpayers money on the development of renewable technologies, yet the countries use of renewable fuel has gone down not up in the past 12 years.

There seems to be a major disconnect between Department of Energy's need to research new technologies and the markets ability to use these technologies.

In the area of conservation and renewable energy sources, the Department of Energy continues to increase their budget even though there are few mentions of any achievements the last \$3 billion the Department of Energy has spent on such programs. As far as I know, none of the projects Department of Energy has been working on in the area of conservation of fuel have reached the public yet. Where are the widespread gains in efficiency these costly programs promise us?

The other concern I have with the Department of Energy's budget is the nuclear waste revolving fund and the proposed special fund to be established for the propose of additional funding.

The purpose of the nuclear waste revolving fund was to be just that, a revolving fund. This is money being taken from utilities ratepayers for a specific purpose and these moneys are not being used for the original purpose. Most people would be in jail if they did what the Department of Energy and Congress together do to the nuclear waste revolving fund. I would like to see the Department come forward with a clear and committed plan to move forward on a nuclear spent fuel depository.

The Connecticut rate payers, just like the ratepayers in other States with nuclear energy do not know that they are paying for something under a false pretense. I

feel I am doing the ratepayers in my district a disservice by not encouraging you to deal with this issue in a more aggressive manner.

There is \$4 billion in ratepayers funds that are unavailable to the nuclear waste fund program that need to be released. We need to get moving on this project as soon as possible.

I look forward to working with you on these issues, Madam Secretary, and other matters at the Department of Energy. Thank you for testifying before this subcommittee today.

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#### OPENING STATEMENT OF HON. MICHAEL BILIRAKIS

Mr. Chairman, I want to commend you for calling this timely hearing regarding the Department of Energy's budget proposal for fiscal year 1995. In a time of tight budgets, priority-setting becomes increasingly important, especially in an Agency with as many pressing demands on its resources as the Department of Energy.

One such urgent matter that has been entrusted to the Department is finding an appropriate site for a repository for our civilian radioactive waste. To ensure that adequate funding would be available for this program, Congress created the nuclear waste fund in 1982. The fund is made up of a fee imposed upon electric ratepayers when they purchase nuclear power. Our Nation's citizens have now paid over \$8 billion into the fund.

Because the fund has gotten wrapped up into the deficit reduction process, this money has not been available for the purpose for which it was collected.

I commend the administration for attempting to come up with a mechanism to correct this inequitable situation. Although we have yet to see legislative language, we have been briefed on the substance of the proposal. I have to say I have some concerns regarding the structure of the proposal. Among these concerns are the continued unavailability of the \$4 billion already in the existing fund, as well as the absence of congressional oversight of the use of the money from the permanent appropriation.

I am also deeply interested in the Department's plans to meet its obligation to begin acceptance of civilian waste in 1998. I would specifically like to know what the Department plans to do to ensure that ratepayers that are paying into the nuclear waste fund do not also have to pay for on-site storage of nuclear waste in the interim period before the construction of a Federal repository.

I look forward to hearing the Department's explanation of the nuclear waste fund proposal, and working with the Department to ensure that this program has the funds that it needs to complete its mission.

Thank you Mr. Chairman.

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#### STATEMENT OF HON. CARLOS J. MOORHEAD

Mr. Chairman, I am pleased that we are here today to review the Department of Energy budget. The Department's budget reflects its priorities and its focus for the coming year, so it is important for us to examine it carefully. I am pleased with a number of initiatives the Department is undertaking, but I am also concerned about the shift away from some very important existing programs.

First, I commend the administration for its voluntary, market-based approach to reaching our global climate change targets. I am pleased to see that the Department is committing significant resources to assure that the plan is a success. If it doesn't work, there are some, I'm sure, who will seek command and control type regulations to achieve greenhouse gas reductions. I look forward to working with you to ensure that the voluntary approach has every chance to succeed.

On the other hand, I am extremely concerned about the Department's continuing shift away from advanced nuclear reactor research. We are all aware that our conventional energy resources, such as oil and gas, won't last forever. We must keep the nuclear option open. By discontinuing funding for programs like the advanced liquid metal reactor and the high temperature gas-cooled reactor, I believe we are short-changing our future.

Finally, I am concerned about the health of our domestic oil and gas industry. Although the administration has developed a gas and oil initiative, oil prices continue to stay low. I'm afraid that our domestic oil and gas industry needs immediate help in order to survive. I am very interested in what the Department plans to do to address this important economic and national security issue.

Thank you Mr. Chairman.

## OPENING STATEMENT OF HON. J. DENNIS HASTERT

Mr. Chairman, I want to thank you for convening this hearing today on the Department of Energy's fiscal year 1995 budget request. Thank you too, Madam Secretary for coming to testify before us today. I welcome you and look forward to hearing your remarks regarding DOE's budget.

As you know, the Fermi National Accelerator Laboratory in Batavia, Illinois is an important issue to me and the residents of my district. As you are also aware, Fermilab is the premier national laboratory for high-energy physics in the United States. In fact, Fermilab is home to the largest and most powerful particle accelerator in the world. Furthermore, Fermilab serves more than 2,000 U.S. and foreign researchers conducting experiments at the forefront of high-energy physics. It is imperative that we fund Fermilab at a level that will allow it to remain among the world leaders in high-energy physics.

Of particular importance in maintaining the United States as a world leader in high-energy physics is construction of the Main Injector at Fermilab. Construction of the Main Injector will give Fermilab's Tevatron accelerator more power for discovery by increasing the number of particles that collide at high energy. Last year, Madam Secretary, you stated that you are committed to providing funding to complete construction of the Main Injector. I applaud you for your commitment to this important project.

However, notwithstanding my appreciation for this commitment, I remain concerned about funding for the Main Injector. While I realize that funding for the Main Injector reflects an increase for fiscal year 1995, I am concerned whether relatively low levels of funding for the Main Injector in previous DOE budgets will delay completion of this project beyond its targeted date of fiscal year 1997. Indeed, if the United States is to remain a world leader in high-energy physics, which I believe many on this subcommittee would agree is important and of which I believe you also agree, we must designate this project as one of high priority within DOE's budget and fund it accordingly.

Likewise, I am concerned about the continued decrease in Fermilab's base budget. Indeed, since 1989 Fermilab's base budget which includes operations, equipment and other plant projects has declined by 20 percent. For fiscal year 1995, Fermilab's operating budget will be decreased by \$5 million from its funding level in fiscal year 1994. While I understand the budget constraints under which the Federal Government is operating and realize that it is not possible to fund all of DOE's laboratories at maximum levels, I am nevertheless concerned that the accumulative impact of these decreases at Fermilab could adversely effect U.S. efforts to remain a world leader in high-energy physics.

In conclusion, I look forward to working with you on DOE's fiscal year 1995 budget as well as other issues that may come before this subcommittee this year.

Mr. SHARP. Madam Secretary, we are very pleased to hear from you at this point.

**STATEMENT OF HON. HAZEL R. O'LEARY, SECRETARY, DEPARTMENT OF ENERGY, ACCOMPANIED BY DANIEL A. DREYFUS, DIRECTOR, OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

Secretary O'LEARY. Thank you, Mr. Chairman.

I would ask that my formal remarks be made a part of the record and pick up on the themes that you have introduced—you and Mr. Synar have introduced.

I am exceedingly proud of this budget and intend to stay the course and have been engaged in very vigorous discussion in committee hearings through the past week in support of this budget.

In making a dramatic shift 2 years in a row in support of energy efficiency and renewable energy, I think we have done several things: Number one, we really focused on the best way to drive the U.S. economy through creating jobs, the best way to reduce emissions, and, equally as importantly, we have heard the concerns and the desires of the American public outside of the Beltway that this is the right way to go. As someone else has said, it is good for com-



munities, it is good for jobs, it is good for reducing emissions, and makes sense to us by every quantifiable outcome we can identify.

I lately had someone pass off to me an analysis that was pulled together in the previous administration, the proposal being the analysis offered up be used to rank the budget in fiscal year 1993. This analysis never saw the light of day, but if it had, then a budget in the prior administration from the DOE might well have looked like the budget that we presented last year and we are presenting this year. So I understand that, by any reasoned and rational analysis, this is the correct budget for today and for the times.

I would also like to add that sometime next week, as I believe it, the Department of Energy, in conjunction with the Sustainable Energy Coalition, will hold a press conference in support of this energy efficiency and renewable budget that we are offering to the American budget through the Congress. I would point out that this is the first time a coalition of groups interested in sustainable energy, reducing emissions, has ever met and joined with the Department of Energy in support of a direction that we are taking, and I am very proud of that piece.

I would like to talk about that for a brief moment and point out, too, that we continue our trend in support of natural gas and spending for fiscal year 1995 is up 47 percent, and that is on top of the 35 percent increase that we offered last year, and, as has already been indicated, the focus is on R&D as well as gas vehicle technology, and certainly upscale market entry and research for fuel cells.

I want to focus for just a moment again on alternative fuel vehicles and point out that the increase this year is at 61 percent. This will allow us to increase the Federal fleet by 15,000 automobiles, not so much focusing on the fact that those of us who are in the Government will be riding in these automobiles but will use these vehicles to pinpoint them in communities where there is already a desire to move to alternative fuel vehicles and engage in the market pull that will lead to the development of infrastructure to support these vehicles.

In so doing, we intend to add 25 clean cities to the Department's Clean Cities Program, thereby focusing on those cities and communities who are in nonattainment areas and allowing those cities to create 200 to 500 refueling stations, which is just what we are after.

I want to touch on two other issues, one of which asks for something dramatically different, and that is the civilian radioactive waste management program. The increase proposed here is some 40 percent or \$152 million. The desire for this increase is to get at the Nuclear Waste Fund which for years has been used as an element to offset the Federal budget, and while I understand the need to have that done, our concern is that we are not moving forward to complete the characterization of Yucca Mountain so that we can assure the public whether this is a go or no go. The idea here is that we will propose legislation to create a new funding approach to offset these moneys that we are after, which I believe are vitally needed in that program area.

I have been told by some that this is not a very pragmatic hope, to presume that we can get legislation this year to permit us to offset this money with earnings contemplated coming from the Uranium Enrichment Corporation, but I hope that this committee or some committee will hold hearings on this proposal because I believe it is important to move forward and complete the characterization and in as timely a fashion as possible.

Finally, I want to touch on the nuclear research and development program which is down 25 percent compared to the very large reduction of last year. The work we propose to continue in this area is, of course, the work with the light water reactors or those inherently more safe reactors. I would point out to you that everything else has been swept aside.

Most especially I do want to point out to this committee that we are also proposing the termination of the Actinide Recycling Program at Argonne East and the—what is still called the experimental breeder reactor program at Argonne West. In proposing this termination, we are at the same time desirous of holding the scientists and technologists on board at Argonne East and some of them at Argonne West to help us answer some of the questions that have been posed by the study just completed by the National Academy of Sciences which more forcefully supports our desire to get out of Actinide Recycling and focus more on long-term disposition of plutonium both from civilian reactors as well as from weapons production.

I think I would like to conclude my introductory remarks, Mr. Chairman, and now open for questions and answers.

[The prepared statement of Secretary O'Leary follows:]

#### STATEMENT OF HON. HAZEL R. O'LEARY, SECRETARY OF ENERGY

Mr. Chairman, and members of the committee, I am pleased to appear before you today to present the fiscal year 1995 budget for the Department of Energy [DOE]. The Department's mission has changed dramatically. To respond to the change, our task is to move away from the Cold War economy and assist the President in achieving his goal of creating an economy that invests in people and utilizes our scientific assets to increase the income of the American people. This year I come before you to describe how we are delivering on our promises and how we have fundamentally changed the way we do business.

The Department of Energy has a rich heritage of meeting important national goals in the areas of energy, defense, and science. In this post-Cold War world, our challenge is to focus the Department's extraordinary scientific and technological assets toward new goals: fueling a competitive economy, developing and deploying clean energy resources, improving the environment through waste management and pollution prevention, and reducing the nuclear danger.

These challenges cut across our program areas, core competencies, and professional expertise. Tackling them will require a commitment to teamwork throughout the Department, resulting in a high level of integration across departmental programs.

A fundamental transformation has taken place within the Department in the past year that has dramatically enhanced our ability to deliver critical products, services, and results to our customers—the American people. We have used an integrated, common-sense approach in charting this course for change, relying on principles of strategic planning and emphasizing the concept of total quality management.

Our strategic plan is an initial step in an ongoing effort to define and integrate the four core businesses of the Department of Energy. These core businesses are: Energy Resources, Science and Technology, National Security, and Environmental Management. Our strategic plan has shaped and guided the fiscal year 1995 budget and will continue to play a central role in shaping future budgets based on the Departments priorities, goals and performance measures. The strategic plan goals and performance indicators will allow us to measure progress toward our new vision—



a vision of providing leadership in addressing some of the Nation's most important needs. These goals and performance indicators will also allow you to determine how well we are achieving our vision.

By the end of this century, the Department of Energy, through its leadership in science and technological assets, will advance U.S. economic, energy, environmental, and national security goals in ensuring that the U.S. leads the world in developing, and applying sustainable, clean, and economically competitive energy technologies. We will continue advancements as a key contributor in maintaining U.S. global competitiveness through leadership in advanced environmentally-conscious materials, such as alternatives to Chlorofluorocarbons; technologies; and industrial processes. We will be a major partner in world class science and technology through our national laboratories, research centers, university research, and education and information dissemination programs; a world leader in environmental restoration, waste management, and pollution prevention; and we will continue to be a vital contributor to reducing the global nuclear danger through our national security and non-proliferation activities.

In the last few years, the world has changed dramatically with an increased emphasis on economic and environmental concerns. Our budget reflects these changes. We have significantly shifted funding for research and development (R&D) in coal and nuclear energy, while increasing funding for energy efficiency and increasing diversity of our energy supply, including renewable energy and natural gas. Emphasis has been placed on Energy Efficiency and Renewable projects because they provided a mass of business market opportunities both domestically and internationally.

We have shifted our national security focus from nuclear weapons production to stockpile stewardship, nonproliferation, and environmental management of our weapons sites. For the first time in the history of DOE, our budget for environmental management exceeds that allocated for defense programs.

The Department has extended its science and technology leadership with a new emphasis on applied research and partnering with industry. We are the leading Federal agency in patent applications with more than 1,000 from 1990 to 1992 and the leading Agency in licenses granted, with more than 400 during that same period. In 1993, the Federal Government received 34 "R&D 100 Awards" given annually for the most; important inventions. DOE won 26 of the awards. One example was a new, less costly, more effective process for removing chlorine bleach waste from process streams.

Our proudest accomplishments of fiscal year 1993 are ones that have produced real results for Americans: improving U.S. competitiveness, increasing energy efficiency, producing scientific and technological breakthroughs, improving environmental quality and creating jobs.

In Energy Resources we provided new investments in energy efficiency and renewable energy programs, creating government/industry partnership projects which reduced energy consumption, lessened energy costs and lowered the environmental impacts of energy production and use. We began a Domestic Natural Gas and Oil Initiative that promises to boost markets for natural gas by 20 percent over 1991 levels by 2010 and lessen our dependence on insecure sources of foreign oil. We expanded energy analysis and diagnostic centers to include 25 universities and performed 585 industrial energy audits which brings cumulative audits to 4,353 with an estimated savings of \$438 million. We purchased more than 5,000 alternative fueled vehicles. We provided weatherization assistance for 97,000 low-income homes and made approximately 800 grants for assistance for an estimated 1,350 schools and hospitals under the Institutional Conservation Program.

We led the development of the administration's Climate Change Action Plan which will help enable the country to meet the President's commitment to reduce U.S. greenhouse gas emissions to 1990 levels by the year 2000, and therefore, lower the threat of global warming. DOE was a catalyst to involve private industry to develop voluntary cost-effective programs and commitments to reduce greenhouse gas emissions in the future. The administrations Climate Change Action Plan will invest \$1.9 billion over 5 years, leverage \$60 billion in investments and save \$270 billion in energy costs by the year 2010.

We have completed the planned 5 rounds of the Clean Coal Technology demonstration program and are proposing, in fiscal year 1995, a Clean Coal Technology export initiative.

In driving industrial competitiveness, our results are interwoven within all of our core businesses. We initiated an agreement with the "Big Three" American automakers for collaborative research in the development of the super-efficient "Clean Car" which promises to reduce the Nation's dependence on oil. We established more than 300 new cooperative research and development agreements (CRADA's) between businesses and the DOE Laboratories to promote economic growth through

public investments with the private sector, and found "real-world" applications for the know-how and technology developed by our defense, energy, and environmental efforts. We also developed partnerships with the medical community to apply Cold War technologies to combat breast cancer and other diseases, and, working with our laboratories, universities, and integrated industries, we established an agreement with the American Textile Industry Partnership (AMTEX) to bolster the textile industry and save more than 1 million U.S. jobs.

In Science and Technology we produced scientific and technological breakthroughs, including establishing a new world record for generating power from the controlled fusion experimental facility at DOE's Princeton Plasma Physics Laboratory. This demonstrated the potential for an unprecedented energy supply for the future. We also increased our commitment to supporting math and science education at Historically Black Colleges and Universities contributing to the future for all Americans.

Environmental Management, DOE's largest program, is focusing its resources on getting results. We reduced one of the highest risk problems in the system by installing an experimental pump that substantially reduces the risk of explosion from the generation of explosive gases at underground storage tanks at Hanford. We have put more resources into moving dirt and not simply generating paper by beginning to use a new strategy that stabilizes and cleans up sites without unnecessary studies, while investing in research to develop more cost-effective environmental technologies, such as the "Minimum Additive Waste Stabilization" at Fernald. Our new way of doing business in the Environmental Management program is now being used at Hanford where the Department negotiated the Tri-Party Agreement to include technically feasible milestones, significant cost savings, and dozens of interim expedited response actions without waiting for a lot of paperwork. At Rocky Flats site, we will be stabilizing some dangerous forms of plutonium, and we have entered into negotiations with the Environmental Protection Agency and the State of Colorado to revise the existing compliance agreement.

These and numerous other successes serve to bolster our commitment to continued progress. As we developed our strategic plan, we asked ourselves four questions which serve as the main measures of success we will use to judge our progress. Will our efforts create jobs? Will our efforts reduce emissions? Will our efforts move technology into the market place? Will our efforts increase competitiveness and exports? Our transformation in the way we do business has enabled us to use the Department's assets to make the country more competitive and secure, and we are committed to addressing these four questions as we prioritize our funding requests.

The fiscal year 1994 budget and our fiscal year 1995 budget request further demonstrate our commitment to make good on our promises to change the Department's priorities to meet the Nation's needs. Our fiscal year 1995 budget is designed to advance U.S. competitiveness, productivity and job creation, through our core businesses in energy, science and technology, national security, and environmental management.

The Energy Resources fiscal year 1995 budget supports investments in Efficiency and Renewables through climate change, natural gas programs and alternative fueled vehicles. The request raises the total for Energy Efficiency and Renewable Energy programs to \$1.359 billion, an increase of \$340 million (33 percent) over the fiscal year 1994 appropriation. In the area of Solar and Renewables, the fiscal year 1995 request increases 15 percent from fiscal year 1994 to fiscal year 1995 with the largest increase attributable to Solar programs. The increase for Solar programs is in the area of Climate Change. These funds will support renewable technologies supply using cooperative projects with utilities, power system producers and consumers with the goal of moving technology into the marketplace.

The total Energy Resources budget will reduce energy use by an estimated 4 percent and carbon emissions by 4 percent by the year 2000; increase gas use 20 percent by the year 2000; create 20,000 jobs by 1995; and weatherize 126,000 homes and upgrade 1,350 schools and hospitals in fiscal year 1995. The Energy Efficiency program area can save \$25-\$30 billion and the equivalent of 180 million barrels of oil by the year 2000.

Residential and commercial buildings consume over a third of all U.S. primary energy and over 65 percent of all the electricity we generate. The fiscal year 1995 request for Building Technologies Sector is \$179.3 million, a 120 percent increase over the fiscal year 1994 level. The goal of the Building Technology area is to improve performance and cost-effectiveness of building materials, lighting, heating and cooling and appliances. Over the next 20 years this program can improve energy efficiency by 30 percent and can free investment capital that would be required to build 80 powerplants. By 2010, consumer energy expenditures can be reduced by \$7.5 bil-

lion and by the year 2000, the Federal Energy Management program can save more than \$400 million in energy costs.

Transportation accounts for 64 percent of U.S. oil use and is 97 percent dependent on oil. The Transportation Sector budget has increased 28 percent from fiscal year 1994 to fiscal year 1995. The program supports battery technology, fuel cell technology, hybrid propulsion systems, ceramic applications for advanced engines, improved diesel engines, gas turbines and alternative fueled vehicles. Our goal is to triple fuel economy in a prototype vehicle by 2005 and reduce gasoline use by 20 percent by 2010. Additionally, the alternative fueled vehicles program increases the alternative fueled vehicles Federal fleet by 15,000 cars and develops a refueling infrastructure plan in fiscal year 1995.

Industry accounts for about one-third of the total primary energy use in the United States. The fiscal year 1995 budget requests of \$180.7 million is 44 percent above the fiscal year 1994 enacted level. The Industrial Sector through cost sharing agreements will reduce capital costs, improve energy efficiency and reduce environmental emissions. The program seeks to utilize, reduce and prevent waste material in a variety of areas. Specifically, our goal is to reduce chlorisiline wastes by 50,000 tons each year, reduce lithography wastes by 1 million gallons each year, reduce hazardous waste water, eliminate waste methanol, eliminate use of chlorofluorocarbons, eliminate manufacturing cleaning steps, and reduce nitrogen oxide by 1 million tons per year by 2010.

The Climate Change Action Plan will leverage Federal dollars in technical Assistance and technology development and transfers to produce significant and cost-effective private sector investments in efficiency improvements. The programmatic goals are to: achieve carbon emission reductions of 27 million metric tons per year by 2000; employ market incentives to accelerate new product development and deployment; achieve 12.2 million metric tons of greenhouse gas emissions reductions by 2000; and reduce CO<sub>2</sub> emissions by 66 million metric tons.

Currently, the average wholesale price of electricity ranges from 3 cents to 6 cents per kWh, average national retail is 5 cents to 8 cents per kWh and the cost of peak power ranges from 8 cents to 12 cents per kWh. In the Renewable Energy area, based on our fiscal year 1995 funding request, renewable energy performance improvements can be accomplished. Energy produced with Photovoltaics now costs 12 cents per kWh. By the turn of the century, we estimate advances can produce photovoltaic energy for 12 cents to 15 cents per kWh and, by 2005, for as low as 6 cents per kWh. Also, Solar Energy will be able to breakdown toxic organic wastes at \$3 per thousand gallons of hazardous waste water treated by 1996. For Wind Energy, based on 13 mph winds, a cost of 4 cents per kWh can be achieved by the year 2000. Biomass Energy can cost 4.9 cents per kWh by 2000 and 4.7 cents by 2010. Advances in Biomass technology can also reduce Carbon dioxide emissions by 34 million metric tons by 2000. Geothermal Energy can cost 4.15 cents per kWh by 2000 with the added potential of exporting \$2 to \$3 billion in technology to developing countries.

The fiscal year 1995 budget request of \$244 million for Strategic Petroleum Reserve continues operating and maintenance activities at a prudent, responsible level to assure a cost effective capability to respond to a Presidential order to draw down the Reserve. The inventory by the end of fiscal year 1994 is projected to be 591.6 million barrels. The fiscal year 1995 budget proposes to suspend oil acquisition activities as one of the administration's saving initiatives. Actions to resolve problems associated with elevated oil temperatures and higher than, normal gas content in some of the Crude oil will continue. The fiscal year 1995 budget request also continues the comprehensive Life Extension Program to extend the useful life of critical facilities and systems to the year 2025 by streamlining existing operating systems and using advanced systems technology to improve reliability while reducing life cycle costs.

For many years, coal and nuclear programs received significant levels of funding. Compared to the fiscal year 1995 request, coal and nuclear funding have decreased by a total of 60 percent since fiscal year 1991, while efficiency and renewables funding has doubled and natural gas funding has tripled. The reduction in the coal budget is not intended to reflect a significant lessening of the importance of coal in our energy mix. Rather, it results from reduced funding needs in fiscal year 1995 for the Clean Coal Technology demonstration program and a refocusing of coal research and development to the super clean high efficiency systems for the production of electric power, the major market for coal in the United States. We recognize that coal provides 55 percent of U.S. electric power and we are not abandoning this important source of energy.

The Clean Coal Technology program is a joint technology demonstration effort by government and industry using a 50 percent cost share ratio. The technologies that



will be moved to the commercial threshold reflect the strategic importance of coal to the U.S. economy. Further, the international marketplace offers opportunities for U.S. companies to market their technologies which will create U.S. jobs and strengthen the U.S. economy. In addition, the program provides for a recoupment of public investments from major commercial successes. The Clean Coal Technology program also supports the Climate Change Action Plan.

The budget reduces funding for commercial nuclear power research and development. Nuclear energy provides 20 percent of U.S. electric power and we are maintaining the Light Water Reactor technology while ensuring safe reactor designs. For Advanced Reactor Research and Development, the Experimental Breeder Reactor II began phase out in fiscal year 1994. Similarly, the Actinide Recycle program is proposed for termination at the end of fiscal year 1994. We will develop a proposal on how to redirect the valuable intellectual and physical resources to higher priority programs. We are committed to mitigating any job loss and using this highly trained workforce.

The Office of Civilian Radioactive Waste Management's mission is to provide for the permanent disposal of spent fuel from commercial nuclear reactors and high-level radioactive waste from defense activities in a manner that protects the health and safety of the public and the quality of the environment. We are currently proposing a restructured program to assure efficient progress toward determining the suitability of the Yucca Mountain site for a permanent repository and we are evaluating a design for multipurpose canisters. The administration is proposing that appropriations continue in amounts about equal to the fiscal year 1994 level and, in addition, the administration is requesting that an additional portion of each year's utility fee receipts in the Nuclear Waste Fund be made available for obligation without further appropriations. This proposal will enable the program to utilize a greater portion of utility fee receipts to provide reasonable assurance of meeting current schedules.

This would allow for an increase of \$148 million in fiscal year 1995 and would provide access to a cumulative total of \$1.3 billion from this source through 1999.

Our fiscal year 1995 budget for Science and Technology requests \$2.5 billion for ongoing energy research projects and sustains our support for critical national applied and basic science projects. The unique resources of the Department's laboratories and the country's universities are used to maintain leadership in basic research, to increasingly focus applied research, and to maintain world technical leadership through long-term, systemic reform of science and mathematics education. The fiscal year 1995 budget request of \$2.9 billion for fundamental science research includes funds for Advanced Neutron Source; the B-Factory, a Presidential initiative to study the fundamental aspects of the structure of matter with the construction of a high luminosity electron-positron colliding beam machine; and the Tokamak Physics Experiment for fusion energy. The budget also reflects requirements for close out of the Superconducting Super Collider (SSC) project (\$180 million). On February 7, 1994, the Department transmitted to Congress the SSC Baseline Termination Plan describing the strategy for an orderly close out of the facility. The fiscal year 1995 request is based on a number of uncertainties that involve the possible future uses of the SSC assets and also issues concerning a Texas settlement. More detailed information for this request is being developed and will be forwarded to Congress within the next 2 months. Applied science projects will drive industrial competitiveness advances in the information highway, advanced materials and manufacturing, clean car, and biotechnology.

Technology Transfer, included in the Science and Technology budget, will grow at a rapid pace. Examples of measurable results will include more effective mammograms, improved infectious diseases diagnostics, improved production methods for computer components, improved high technology methods to manufacture computer chips, and industrial waste minimization.

This budget invests in U.S. competitiveness. Our fiscal year 1995 budget requests \$1,655 million for partnerships with private industry, a \$114 million increase (7 percent) over the fiscal year 1994 Appropriation. This increase allows for the continued partnership between private industry and DOE Laboratories to keep the U.S. economy growing and creating high wage jobs. In addition, this request allows for a total of 1,000 Cooperative Research and Development Agreements (CRADA's) by the end of fiscal year 1995 which will leverage over \$1 billion worth of industry costs sharing (at 60 percent) and in-kind contributions.

Our National Security budget of \$5.6 billion for fiscal year 1995 continues reductions in spending for Defense Programs (15 percent) while ensuring the Department's role in reducing the global nuclear danger. This will be done by maintaining the scientific and technological competence of our defense laboratories, dismantling 2,000 weapons per year in a safe and environmentally sound manner, and enabling

the Department's national security infrastructure to assist in industrial competitiveness partnerships. The Department has suspended nuclear tests, but maintains testing capability to perform underground testing, if approved by the administration and Congress. Stewardship of the stockpile will require extensive use of past nuclear test data in combination with future, nonnuclear test data and aggressive application of computational modeling, experimental facilities and simulators to further a comprehensive understanding of the behavior of nuclear weapons and the effect of radiation on military systems, along with maintenance of a strong interdisciplinary science and engineering base. Also, the fiscal year 1995 budget recognizes our leadership role in non-proliferation activities, in energy related intelligence, and in declassifying documents that no longer require secure protection by ensuring level funding for the Department's Intelligence and National Security programs.

Our fiscal year 1995 budget for Environmental Management requests \$6.3 billion for Environmental Restoration and Waste Management activities at the Department, which includes an increase of \$184 million (3 percent). This funding level will help enable the Department to meet its contractual and moral obligations to communities around the country to make progress in reducing the risks and improving the environmental quality associated with DOE facilities. This request supports the completion of 12 decontamination and decommissioning projects, 13 site remedial actions, 100 interim actions and transfers 24 technologies to private industry.

Our budgets are based on performance measurement standards that we will use to measure our success. We expect you and the American public to hold us to our commitments.

Over the years your continued support of the Department of Energy has laid a strong foundation for our transformation. Our proposed programs are exciting and will have a real and positive impact on Americans. I ask for your support in helping us to build on and achieve our successes.

Mr. SHARP. Thank you very much, Madam Secretary.

I will recognize myself for 5 minutes.

Let's start with the Nuclear Waste Fund that you were just addressing, and let me ask you, it strikes me from your final comments that there may be a relationship here between Yucca Mountain characterization and your ability to keep the scientific personnel at Argonne West, and East too, I believe.

Secretary O'LEARY. Yes.

Mr. SHARP. That if we are able to proceed in an expeditious manner on the research in the other elements that are involved in characterization, that we can meet two goals, not only our essential goal, which is to do something about nuclear waste disposal and to find out once and for all whether or not the Nevada site is the appropriate place, but also to keeping the personnel, the team, the experience, and the extraordinary assets that we have at these laboratories.

Is that a fair—

Secretary O'LEARY. I want to be clear in the fact that I think that is a fair conclusion. What I would tell you is that for the last 3 or 4 weeks we have had our people in our nuclear program area working with the leadership at Argonne to identify appropriate follow-on work, and I say appropriate to mean this. It is clear to me that we shouldn't lose the valuable resource, but I am not after make-work, and rather than definitively tell you that I see a firm nexus, I would like the opportunity for that examination to continue. But surely one piece of work ties to the other.

Mr. SHARP. Well, I think you are wisely pursuing those questions some of us had raised over in the Natural Resources Committee, earlier—I guess it was last year—when you began your review of the nuclear waste site and its program.

It was essentially, as I understand it, a managerial review, and some of us were urging perhaps a broader review of the whole policy, not because we think we ought to back out of Yucca Mountain but just because it seemed to be an opportune time with a new administration and a whole host of new factors in the energy market, to, just seize this to review. It sounds to me like, in a way, that that is what you are doing here, that we need to make sure all elements of what we are doing in nuclear waste seem to make sense and that we are pursuing every avenue that we can.

To me, this is not a pro or anti nuclear issue, this is pure and simple, we have a serious responsibility to carry out, and I would hope you would not stand in the way of that because of their views of nuclear power but, rather, help us find the most effective way to dispose of something that is out there and must be disposed of.

Secretary O'LEARY. Yes. Let me respond to this by saying that in the time since we last had this discussion, Mr. Chairman, I have done several things: One, I asked for now, the financial and management review, which is being done under the direction of an individual appointed by the Department of Energy and an individual appointed by the Governor of the State of Nevada, and that is really to look at the question of what and how we have run our management program and also our financial accountability.

The other thing I did was, I asked Dr. Dreyfus to identify a disinterested scholar to look at and review the 200 studies that have already, and the reports that have already, been done on Yucca Mountain. The final report was just delivered to us last Friday, is my recollection, and I have it, and I am reading it on airplanes.

Addressing your reference to a broader policy review, just most recently after the National Academy of Sciences study, under the direction of Charles Curtis, what we have done is to form a cross-cutting group within the Department of Energy to try and analyze all issues involving plutonium and fissile material disposition, which is ultimately to accomplish the piece that I talked about last year with not a great deal of certainty or sophistication, and that was identify all of our waste management issues and, most importantly for the short term, our storage issue, and to tie the entire piece together with the technical issue that involves disposition of all of these materials. Bob DeGrasse is heading this effort. It is cross-cutting across the Federal Government, and that this work will be completed in time for the development of the 1996 budget.

But some of this work will drop off early to permit us to wrestle with the issues involving the recommendations coming out of the National Academy of Sciences, which is, (1) to deal with the interim storage issue; and (2) take a hard look at the technology; and the paths that we have been pointed in are two. One is to examine existing reactors which would permit the chemical reduction of plutonium especially, and, (2) to examine very carefully the issue of whether or not vitrification might be the answer to plutonium disposition.

The idea now is to have all of the technical reviews at least be synthesized in one place, which had not been the case within the Department of Energy, the defense program being on one side and the civilian program on the other. The same is true of the waste program, as we had discussed earlier.



I need to say another word about—no, I am finished. I will respond to a question.

Mr. SHARP. Well, let me just say more power to you in that effort, because my sense is that while we have fragmented jurisdiction in this subcommittee, that is the case all across the Congress. As you allude to the way in which the Department has historically operated, there have been at least two divisions there. The civilian-military division has been historic in this particular program, one under enormous secrecy and very ambiguous rules, the other much more highly public and highly regulated, and the reality is, now we have massively expensive and technical programs—not because of that, but we have massive expensive and technical work to be done, and so it really cries out for the effort, I think, that you are making, and all of us will be able to make much more sensible judgments about how to proceed.

My time on this round is really up. I do want to indicate to you that we will be looking at the Nuclear Waste Fund issues with your folks. As you know, Wesley Warren, who is a very distinguished and capable staff member of this subcommittee and has served the House of Representatives in the science committee before that, has gone to the White House, so we are reorganizing ourselves. This is an issue in which he has a great deal of interest, and I suspect your Department will be dealing with him in the White House on the issue. We will be trying to deal with it here, and, as you know, you are finding and we are finding that the budgetary rules themselves set such a—I started to say obnoxious parameters, that we find ourselves trying to redefine a program to meet budgetary rules rather than what would be the wisest way to spend the money for the taxpayer, or for the ratepayer in this case, who pays into that fund. And so we are still looking, and Wesley was helping us look at 3 or 4 options about how to be true to the budgetary law and at the same time be able to wisely oversee the management of these funds and get Yucca Mountain characterized.

With that, unless you wish to respond to that——

Secretary O'LEARY. I just wish to share with the chairman and members of this committee that perhaps you do not see as frequently as I do the State regulators representing the ratepayers who paid into this Nuclear Waste Fund, but I see them with increasing regularity. I will tell you that their temperament, going to the dark side, gets worse and worse with every cycle; I will not share with you the rasp on my back from these encounters, but I will tell you that my impression generally is that, of the 32 States who see and understand that they are likely to be impacted by further delay, you know, the noise level and the angst increases. I suspect you will be seeing these people shortly, as I am seeing them.

Mr. SHARP. Well, I think they have a reasonable case.

Secretary O'LEARY. Absolutely.

Mr. SHARP. Money is being taken from each ratepayer that uses nuclear energy, and many people who don't even know they are doing that are paying, and the clear direction is that money is to be used in the development of the nuclear waste disposal program, and yet it sits in a trust fund building up, and work is waiting to be done.

With that, let me recognize the distinguished gentleman from Oklahoma, Mr. Synar.

Mr. SYNAR. I hadn't wanted to explore that topic, but just one warning: Spending money or spending money faster on a broken program doesn't solve it. That is the critical part.

The domestic gas and oil initiative that you earlier announced said that you were going to investigate the impact of the increasing oil imports, that you were going to look for new ways of sustaining production on domestic marginal wells and you were also going to review the tax treatment for the expense in geophysics and geologic services. When are the results of that study going to be available?

Secretary O'LEARY. The study results are to be available about late summer. Are we saying August these days, gentlemen?

In August.

Mr. SYNAR. OK.

As the chairman pointed out, you do have some serious problems with SPRO in operations and maintenance, and one of the things that we are concerned about is when those problems will be solved, and then, second, when are you going to start buying oil again?

In that context, whether or not we can target domestic purchase as a way to buffer this market, now I am told that you do not have the practical authority for those purchases. I guess the natural question is, since SPRO is up for reauthorization, would you be willing to consider changing the direction of SPRO purchases in order to direct it towards domestic producers?

Secretary O'LEARY. Plainly, clearly, yes I would be willing to consider that fact.

Let me tell you what our timetable is. We will shortly be completing in the Department of Energy an analysis that will permit us to have the facts and the policy guidance to support new legislation. I understand from the folks who are working in fossil that very shortly, within days, we will be in a position to engage the Congress in discussion prior to actually introducing this legislation. So I look very much forward to discussions with the members of this committee when we are prepared.

I am well aware of the fact and was made aware of the fact when we were doing our last solicitation, that there was a clear desire on part of especially the independent oil producing community to see SPRO directed in this way. I am aware of the fact that this might be a valuable tool. I am also aware of the fact that the legislation as currently written doesn't permit us to use this.

Now our program people pointed out to me that part of the problem will be ease of delivery if we were to focus on some of the stripper and marginal well producers in the Southwest, so we need to discuss that, and I need to bring to you what some of the apparent barriers are.

Finally, I want to discuss the timetable for resolving the hot oil problem, which is March of next year. The gassy oil problem takes longer to resolve, and I am now being told that we will not have this issue completely resolved in the retrofit and fix until December of 1997. But in the interim I want to assure you that not all ability to recover will be curtailed, and so there would be some opportunity, if we can find the wherewithal in terms of budget authority, to be doing fills well before March of 1995.



Mr. SYNAR. On another subject, you have added \$7 million to the budget for the isotope program, but it is obvious that we are going to need to restructure that program legislatively. What is the timetable for reorganizing that and submitting it in the legislation?

Secretary O'LEARY. Well, Dr. Dreyfus tells me—is he here? Yes, he is here; he is here every day, God love him—Dan would be eloquent, if it were his turn to testify, to tell you that he has many problems in this program for which there are needs and no budget authority. He has got reports coming very soon to him, and we will be taking a hard look at that program.

There is some talk about reauthorization. I am clear, the pressure to get this work done. He is not yet clear from his people which reactor was appropriate for examination and retrofit. As I understand it, there are two likely candidates, and when we know that, we will come to you with some discussion.

Mr. SYNAR. What is the timetable?

Secretary O'LEARY. Dan has not told me clearly. Maybe he will tell us now.

Dr. Dreyfus, do you want to come up and introduce yourself?

Mr. SHARP. Do you want to identify yourself, Mr. Dreyfus, for the record?

Mr. DREYFUS. We have reorganized internally. We have a strategy which is under review within the Department in which we had a target date to complete in March. That will require legislative changes, and, in fact, in order to carry it out, it would require either a budget amendment for 1995 or some sort of budgetary adjustment, which of course will be a Department-wide consideration.

Mr. SYNAR. When are you going to bring it down here?

Mr. DREYFUS. By the end of March, definitely by the end of March. I would like to say March 15, but I don't have confidence in that date. The end of March.

Mr. SHARP. The time of the gentleman has expired. We will come back.

The gentleman from Illinois, Mr. Hastert, is recognized.

Mr. HASTERT. I thank the chairman and also want to give proper recognition to the chairman. We have been working on these issues for a long time, and just to see how the budgetary significance comes out of the energy bill that we wrote a year ago, I guess, is interesting. So there are some issues out there.

I happen to have a district that is surrounded by 12 nuclear plants, and we are literally starting to stack nuclear waste, and so my constituents are concerned about those dollars being put into the trust fund and not being spent on long-term storage or permanent storage of that waste.

Does the use of those funds—is that for high-level radioactive waste or also for low-level radioactive waste?

Secretary O'LEARY. It is for high-level radioactive waste, though some of those funds—I want to be clear to say that the focus of the requirement is on the high-level waste, and some funding is provided for the low-level waste and storage offsets.

Mr. DREYFUS. The Nuclear Waste Fund is entirely dedicated to dealing with spent fuel from commercial reactors. In the program, there is also a provision for general fund appropriations for the defense share of the cost because the high-level waste from the vitri-

fiction plants and weapons cleanup also will be dealt with in the program.

The objective is a pro rata share paid through a defense appropriation, but all of the waste fund is dedicated to civilian spent fuel.

Mr. HASTERT. Secretary O'Leary, the reason I ask is because you are talking about increased activities as far as low-level nuclear waste as well, and at one of the facilities that I have, Fermi Lab in my district, our budget went from I think \$199.5 million operating costs to \$214 million operating costs roughly, but the increase in costs to that facility for building facilities and packaging low-level nuclear waste, which I think is like x-ray film and things like that—

Secretary O'LEARY. Yes.

Mr. HASTERT [continuing]. Has taken a good part of that budget. So in essence we have had a net 4 percent loss.

Secretary O'LEARY. I am understanding your point, and most of the statistics that I have read coming from research facilities and hospitals point out the fact that the cost for managing and ultimate disposal or interim disposal of this low-level waste has increased any place from 25 to 40 percent per, you know, whatever the unit of weight or measurement is.

The difficulty with respect to the low-level waste program focuses not on the funding, as you have just pointed out and Dan has more clearly identified, but focuses on the inability of some of the State compacts to reach real conclusion about siting.

An example of success I would point out would be the compact in the southeast which has focused on a site in North Carolina which is moving forward apace and has finally gotten all of its regulatory work done and has filed for site certification.

Mr. HASTERT. I understand the problems with Illinois, the Illinois-Kentucky compact with which we have had a lot of problems.

Secretary O'LEARY. You got it.

Mr. HASTERT. I was in the legislature when we started that process—when I started. It never got quite finished.

The concern is that those dollars, though, come out of the regular budget, it is not coming out of any type of trust fund.

Secretary O'LEARY. It is not coming out of funds from the Department.

Mr. HASTERT. So you are really eating up real science in order to do that.

I have another question. Last year, when the SSC was terminated, there was \$640 million appropriated for that termination, to go through that process for a year. It is my understanding that this year, out of \$640 million, there is probably about \$220 million that are unspent and will be unspent at the end of the fiscal year, yet in your budget you have \$180 million new appropriation for next fiscal year spent on closing down the SSC. I understand that probably it will be pretty well closed down by October or that period of time. That is the understanding that I have.

Is that a place holder? Or, you know, what are we doing with that \$180 million? Is there a definitive project there?

Secretary O'LEARY. There is a definitive need, and if you will permit me, I will try very quickly to walk through this and then

leave behind for the record a matrix which will very carefully outline what I will go through now.

The committee report on the vote to close the supercollider instructed the Department of Energy and the Secretary specifically to do three things: (1) complete the orderly termination of the superconducting supercollider; (2) identify through some open process a follow-on project at the site so that the site and the work on-going there and the rich community of scientists and physicists there working might continue some work; and, (3) to ensure that the State of Texas and others who had made a contribution to the project received some compensation for expenditures, and that language is not as crisp as it should be.

Let me now try to walk through the numbers for you. The 695 which had been authorized and appropriated for fiscal year 1994 is the number that we focus on along with the carryover from the prior years, bringing the number available to us in the Department for expenditures—now Betty should be here—to 735—thank you, Betty; I didn't know you were behind me; why don't you come up here—available now to accomplish all of those tasks.

The first report made public was on phase one, which is the termination piece, and the number bandied about for the cost of termination was \$650 to \$690 million which contemplates expenditures not for 1 year but through several fiscal years, and I have got the matrix I am going to share with you would walk us through the fiscal year 1997, and you are correct in your figure from the projection for expenditures for termination simply in this fiscal year. It does not contemplate the march through to the end of the termination, and I will come to why it will take so long.

The second piece is now ensuring that the claims of the State of Texas and the counties who have made contribution are met. You may well know that we are engaged in a negotiation with the State of Texas almost daily on the question of settlement to avoid lawsuit. Quite public has been in the press that the Texas claim, they believe, is close to \$500-and-some-odd million representing bonds that they have funded and the interest payments on same.

The claims for the State of Texas derive from a written agreement signed by the Department of Energy in a prior administration and the State of Texas signed in a prior administration. Their right to any remuneration flows from the identification in this document of the right of Texas and others to any property for which they have contributed more than 51 percent. The negotiation now going forward is, how do we identify that property?—which I think we have well done—and now, how do we quantify the valuation of that property?

I am going to come back to that in a minute, but I want to leave you with the number of 500 and X millions of dollars.

Finally, the follow-on project to which the State of Texas has made some proposals coming from their Commission on Research at the superconducting supercollider which has now identified some 3 or 4 projects for follow-on funding. They and we have agreed that we should also take a solicitation from the public generally, but the clear idea is that there should be some follow-on project at the site. The numbers bandied about for the follow-on project range from \$20 to \$25 million per annum, again, moving through 1997, up to



\$50 million, depending upon whether you are taking the number from the National Academy of Science or you are taking it from the State of Texas.

To further continue, our own people have the responsibility to analyze all of these three costs in a report that the conference committee has directed us to complete in July.

The sum and substance of all of this language is that all of the calls on this money identified in the conference report well exceed the amounts available to us in this fiscal year along with the carry-over and in addition to the money we are requesting for fiscal year 1995.

Finally, I will point out, much to the discomfort of the people in the State of Texas, that we still have a question of what, if any, high-energy physics experimentation this Nation will participate in, and the focus has been on the CERN project in Switzerland. I have received a letter from the director of CERN inviting our participation and indicating that in CERN's mind the member countries of CERN think that our participation fee ought to be at \$100 million a year for the next 5 years. That is not even contemplated in this figure.

I say all that, to say that the numbers are not made up at all, and I am clear that the requirement—the minimum requirement will draw down all of the funds identified as well as the \$190 million that we are requesting in the fiscal budget.

And I am sorry to go on for so long, but I will submit for the record the ranking of these requirements, absent the certain requirement which likely our administration will bring to you after the high-energy physics committee finishes their visioning of what ought to be this Nation's policy in support of high-energy physics in the United States of America.

Mr. HASTERT. I thank the Secretary.

Thank you, Mr. Chairman.

Secretary O'LEARY. Sorry.

Mr. SHARP. It sounds like you have been asked this, Madam Secretary.

The gentleman from Idaho, Mr. Crapo, is recognized.

Mr. CRAPO. Thank you, Mr. Chairman.

Madam Secretary, it is my understanding that the Department's overall budget has increased this year from the previous year. Is that correct?

Secretary O'LEARY. Increased?

Mr. CRAPO. Yes.

Secretary O'LEARY. No, sir, decreased by almost 3 percent.

Mr. CRAPO. OK. As you know, I am interested in the liquid metal reactor research which you have discussed.

Secretary O'LEARY. Yes, I know you are.

Mr. CRAPO. And as I read the charts, that project comes under the energy supply research and development section of the budget. Is that correct?

Secretary O'LEARY. That is correct.

Mr. CRAPO. And as I read that section of the budget, that section of the budget has increased by 3.3 percent.

Secretary O'LEARY. Mrs. Smedley has now joined me, and she is going to pull these numbers for me, but you obviously have a page, and if you are reading it, of course you are correct.

Mr. CRAPO. Let me just put it to you that that is what my understanding is from the way I understand the charts. I want to make sure I am reading them correctly.

It is also my understanding from reading the information that other sources of energy supply have had significant increases, such as energy efficiency, solar, wind, renewables, and so forth. One of the lines I see here for some of those is about a 14.4 percent increase.

Secretary O'LEARY. Absolutely.

Mr. CRAPO. The question I have then is, it appears to me to be pretty clear that with that section of the budget increasing and with such significant increases in energy efficiency, solar, wind, renewables, and other types of energy, that the decision to eliminate or to terminate funding for the liquid metal reactor appears to have been a shift in emphasis at the Department of Energy from nuclear research and nuclear energy into solar, wind, renewables, and so forth. Is that a correct assumption?

Secretary O'LEARY. Absolutely, and I have been very blunt and proud to say so.

Mr. CRAPO. What I am driving at here is that many people say that the reason we are eliminating our research into the liquid metal reactor is so that we can save money in the budget, but it appears to me that that money has been shifted over into these other areas of research.

Secretary O'LEARY. That is correct, sir.

Mr. CRAPO. So it is not a budget-cutting issue, it is a shift of priorities.

Secretary O'LEARY. It is a priorities—a shift of priorities, clearly looking to market pull and desire and trying to understand from data both empirical and anecdotal, where we are ought to be betting scarce taxpayer dollars, where we can get the most immediate payoff in terms of capacity, which one can—I don't have to walk you through that exercise—and what the marketplace wants, and clearly in our minds since we began a strategic look at our budget, we are also looking at the opportunity to create jobs in the United States by focusing on technology for which there is a marketplace and a desire and where we have eminence and preeminence.

Mr. CRAPO. I appreciate that. I just wanted to make it clear what the debate was here and what it was not.

Secretary O'LEARY. Gotcha.

Mr. CRAPO. Also, it is my understanding that there is termination money in the budget for this project, and I have been advised that the amount of money that it will take to terminate this research exceeds or at least equals the amount of money that it will take to complete the research. Do you have an understanding in that regard?

Secretary O'LEARY. That is correct, but I will point out to you that whatever time the project is terminated, we will still be expending this money. So on balance it certainly makes sense to get on with the close-down when it is clear that as a matter of policy there is no intent in our administration to complete this project.

Mr. CRAPO. As you know, I disagree with the priority that the Department has set, but if one doesn't accept the Department's priorities to move into the solar, wind, and renewables as opposed to this kind of dramatic reduction in nuclear, then the cost savings factor with regard to the fact of the termination cost is emphasized.

Secretary O'LEARY. Absolutely, but let me make this point, and the point is that we are focusing on the technology which has market pull today, and so I am here defending the policy because I have been told to stay the course, but of course Mr. Synar has now gone.

Mr. CRAPO. I understand that.

Secretary O'LEARY. There you have it.

Mr. CRAPO. Let me also ask, it seems to me when we talk about what the market wants today that sometimes that can be a short-sighted perspective. In the context of the Nuclear Waste Fund and our desires to find some conclusion to the issue of nuclear waste storage or spent fuel reprocessing, it seems me that long term, even if we don't look at nuclear energy production, or energy production, which I think we should, that we should continue to have a national mission focusing on long-term reprocessing research and so forth. Last year at these very hearings the Department of Energy testified that the liquid metal reactor did, in fact, consume rather than breed spent fuel and that therefore it was something that could be utilized in that regard.

My question is, what about the reprocessing future and the future of research looking long term rather than just what the market will bear today?

Secretary O'LEARY. I will tell you that I was one of those people at the Department of Energy testifying in support of that budget. I would also be clear to tell you that I believe I had—if I had not carefully gone through the year examining these issues, I would probably be in the same position this year as I was last, but I am a year older and I have had much better education, I think, or at least more of it.

I want to point out to you these few things. One, for the short term, we do still support light water reactors, and I like that project because there is industry support there, and clearly if we are betting for the short term, we bet there.

With respect to the long term, I am well aware of the fact that we still don't have the technological answer. I am also clear on my examination of that project that over time we could not have built enough reactors to accomplish the goal that both you and I want to see accomplished. As I am understanding it, we would have had to build 20 reactors in the next 10 to 20 years, and nothing I have seen by way of projection for the need for power and the desire to use any new reactor would point me in that direction.

So I had to make a clear decision with respect to where to bet the money, and I added to the weight of that decision our administration's policy with respect to nonproliferation and was very clear on the fact that I did not want to be recommending this technology, which I was not certain would have—its application would have the desired result in a timely fashion and at the same time exacerbated our own policy with respect to nonproliferation. It just did not add up to me.



Mr. CRAPO. Can I just conclude by asking, do we have any long-term nuclear research other than the short-term and the light water reactor? Do we have any long-term nuclear research options available in this budget?

Secretary O'LEARY. We have a place holder in not requesting the take-away of the funds available for the scientific examination at Argonne East and Argonne West, and what I have attempted to do is work with the scientists at Argonne Lab to now focus on those issues which the National Academy of Sciences told us to examine as opposed to this one project that they prefer, and I have been often heard to say, as the nonscientist in this debate, that I am not after supporting projects, I am after supporting a real look at the technology that we have now been pointed to by this august group of scientists who have told us we should be working in this direction.

Mr. CRAPO. Thank you.

Mr. SHARP. The time of the gentleman has expired.

The gentleman from Massachusetts, Mr. Markey, is recognized.

Mr. MARKEY. Thank you.

Welcome, Madam Secretary.

We have come a long way from an exit interview by John Tuck of the Bush Department of Energy wherein he was asked about his impressions of the Department of Energy. He said people didn't understand that the Department of Energy Secretary could not be some Midwest electricity guy, that the Department really is just an annex of the Pentagon. And now that we have a Midwest electricity gal, utility gal, who is the Secretary of Energy, I think in this post-Cold War era, it becomes more apparent that the new agenda which you are setting is more appropriate, more market oriented, more clearly aimed at constructing an energy policy for our country. DOE was 60 percent bomb factory and 40 percent research and development, but not a lot else went on.

I have said in the past my view about the reactor program is, one, it is bad fiscal policy. The Clinch River project cost us \$8 billion and led us nowhere. I think that the existing programs as well are leading us nowhere. We are still 30 or 40 years away from anything that is concrete. That is not good fiscal policy for us.

Second, it is bad energy policy. The utilities of the United States have not ordered a new nuclear power plant for the past 18 years in our country, and if this is such a great idea, it seems to me that the wealthiest industry in the United States—that is, the electric utility industry—should be investing in something which is a good market product. They are not investing in this at all, and it is 18 years since their last order of a nuclear power plant, and I don't think the Federal Government should be engaging in that kind of massive program, and, most dangerously, it is bad proliferation policy.

We have yet to solve the problems of how we ensure that these new technologies are, in fact, secure if we intend on marketing them overseas, and I think on each one of those fronts the problems are insoluble and cause tremendous fiscal strains.

Meanwhile, the change in direction which you have brought helped to focus upon the real investment which utilities are making in conservation, in renewables, and wind and solar and all the way

down the line, and we are helping to reinforce that direction which the industry has already adopted voluntarily pursuant to the pressures of market forces, and the extent to which the initiatives which you have undertaken at the Agency reflect the market and help to augment the direction in which the market is heading in an incontrovertible and inexorable pace, it seems to me it makes a lot of sense.

So I want to applaud you for your shift in direction. It is not anything that I think is out of line with the trends in the market, anyway.

In addition, I want to continue to praise you on your work on the nuclear radiation front and the initiatives you have taken there as well, and if I could, I would like to ask a few questions, if I could, about that subject and get an update from you as to where we may be right now on this particular subject.

Over the weekend, the Albuquerque Tribune reported the identities of six additional patients injected with plutonium during the 1940's and also reported that new documents suggest that the Government may have injected more than 18 persons than the 18 previously reported. Can you describe this new information and indicate how much larger the plutonium experiments may have been on human beings?

Secretary O'LEARY. Yes. First of all, the additional names revealed by the Albuquerque Tribune are additional names known of the 18 human subjects, not newly identified in the class of the 18. There is nothing our staff working either in the field or at any of our facility levels tells us that would cause me to know with certainty, to say the universe is larger. There is nothing that has been brought to us that would lead us to that conclusion.

Mr. MARKEY. Fine.

After the hearing on human radiation experiments in January at the Fernald School that we had up at Waltham, Mass., and the hearing that Chairman Sharp conducted here before this subcommittee that you testified at, I asked a series of follow-up questions in a letter of January 26. One question dealt with the fact that archival files of laboratories associated with the Department of Energy were themselves contaminated with radioactive term. As I noted in my letter, this circumstance provides an unfortunate metaphor for the early part of the atomic age. The cavalier attitudes towards radioactive materials which led to questionable experiments with human subjects may also have caused the very files of the Atomic Energy Commission to become contaminated.

Can you tell the subcommittee whether the contaminated files include those which must be searched as part of the retrieval of information related to the work of the Human Radiation Interagency Working Group, and, if so, at which facilities has such contamination been identified, and what delays in information retrieval do you expect as a result of that delay?

Secretary O'LEARY. I would grasp for my recollection on which facility we found one file that was contaminated. It was at Argonne Lab.

What I would say, quite frankly, is that what we know about conditions during the 1940's and 1950's makes it not unlikely that there would be other files found contaminated.



I want clearly now to emphasize what "contaminated" means so as not to over-alarm people, but I want you and members of this committee left clearly with the fact that nothing contaminated will come out of our facilities.

"Contaminated," in our parlance means anything above background no matter how trace, and so I want to say without personal discussion with the people at Argonne that it is my understanding that any impediment to the search is not great, it is impediment to handing over the materials in a timely fashion because first they must be decontaminated.

Mr. MARKEY. So at what point do you think we might have the answers to those questions with regard to how much of the files that you have to go through—

Secretary O'LEARY. Well, I was hoping not to show up today with no answers, but staff has told me likely 3 more weeks, and I will commit to that 3 weeks today and move to expedite it.

Mr. MARKEY. OK. Thank you.

Mr. SHARP. We will have a second round of questions.

I will recognize myself for 5 minutes now.

Madam Secretary, let me just quickly follow up on that. I think Mr. Markey's questions on how this is proceeding will help all of us as you answer those.

Yesterday, as you may know, in the Energy Daily, the Department was criticized by workers at Fernald Plant in Ohio. There is always a confusion in the discussion between the school in Massachusetts and the plant in Ohio.

Secretary O'LEARY. I know.

Mr. SHARP. Where the claim by the attorneys for the employees is that the employees have waived their rights to privacy, therefore think there should be no inhibition on the part of the Department to release their files, and I wonder if you could comment on that or provide for the record information about that, because we know the privacy issue is tricky. But if the Department is going to be governed by the theory that they have to notify the people first in order to meet their privacy requirements, then obviously that requires a high priority on your part in making those notifications, which is undoubtedly time consuming and takes enormous resources to do.

Secretary O'LEARY. Let me say this. I have had lengthy discussions with our General Counsel Nordhouse on this issue generically and read that news account very late last night and understood likely a question would be asked and did not follow up with conversation with him.

Let me tell you where I stand on this piece, because I want an opportunity to reinforce the thing I said when I last appeared before you, and that is, clearly we want to be releasing that information that impedes the certainty of individuals who need to know that they may have been exposed to levels too high so that they can take appropriate action.

Having said that, Mr. Nordhouse and I understand the requirements once we are in litigation, and that is, the Justice Department generally is in charge of any decisions which further the progress of a case. Mr. Nordhouse has promised me that he is pulling together a long list of policy changes we would like to see or

would like to discuss with the general counsel with the folks over at the Justice Department to make us much more forthcoming than we are.

Having said that, I would like the luxury of the time now to follow this specific issue up with Mr. Nordhouse and be certain that he is engaged in those discussions with the Justice Department.

Mr. SHARP. Well, we would appreciate having the answer to that. Obviously, both the workers in this case and news people in other cases are interested in getting the information, and I think it is very important that we do that as long as we follow the fundamental principles of privacy protection in the process.

Secretary O'LEARY. Fine, and I am clearly sympathetic to this need, and I want to be careful to say this too, but I am also very sensitive to the use of the press in support of litigation, so I am approaching this in a balanced fashion, but I, of course, always balance to the individuals involved and hopefully not overreact to those who may be trying their cases in the press. But I will follow up.

Mr. SHARP. I appreciate that.

Let me raise a couple of other issues that are not directly budget related but they are energy issues. You don't need to comment on this necessarily, but I would like to suggest that perhaps it is time that we more seriously considered lifting the ban that we now have on the export of Alaskan oil. My understanding is, there is almost no one from an energy policy perspective that seriously contends this serves our national interest in terms of energy policy, but politically it has a wonderful rhetorical ring to it. In years when we were in crisis, that gave it cachet among many of us for many years, but there are, of course, now shipping and other interests that like being forced to take that oil to the California market.

But my understanding is that what it really does is not protect the consumers, not protect the domestic supply in any way, it simply complicates and depresses the market for production in California with some risk of loss of production there. So, if anything, it actually has a negative impact on our capacity to produce our own.

Madam Secretary, there are enough controversial issues. My hope is that this may be the kind of issue on which the time has come, the steam has run out, and we can be more rational.

Secretary O'LEARY. Mr. Chairman, that is my hope too, although my mail indicates that there is still a lot of steam on the side of what appears to be the logic, and so I have done what I hope is the right thing, which is to ask our people in policy and in fossil to analyze the impacts of removing that ban both with respect to the marketplace and of course with respect to impact on producers and impact on those U.S. shippers, and I think we are looking for May—in May I think we will be able to come forward and not just talk about our intuitive commonsensical conclusion but have the data to begin a public dialogue.

Mr. SHARP. Well, I think that is very important that it be done. It may well be this is not the year to ultimately try to decide it, given other agenda items that you have, but I think laying that foundation in the debate is worth doing even if people on Capitol Hill find it too politically hot to do it.

Many of us have tried to prevent the efforts to expand its coverage over the years but recognized that politically it was far too hot a potato to seriously reconsider the policy implications. It just wasn't worth anybody's time and the grief that they would politically take on that particular policy front.

With that, let me recognize the distinguished gentleman from Illinois, Mr. Hastert.

Mr. HASTERT. Thank you, Mr. Chairman.

Just a couple more points on personnel. I think in high-energy physics, we have approximately 2,200 high-energy physicists actually working on particle physics today in the United States. Over half of those, about 60 percent, 1,300, are actually at Fermi Lab in my district. But one of the things I questioned in your testimony before, in your answer before: Are we looking at the long-term existence of the SSC facility and trying to find justification for high-energy physicists there? I just didn't understand.

Secretary O'LEARY. No. Clearly there is no employment opportunity for every physicist who is losing or has lost a job at the collider or other labs. The direction that I took very seriously from the committee was to find some follow-on project to ensure that some good result comes from the work there.

I will tell you that in the planning that I have looked at coming from the site, the numbers of scientists now employed at the site is down at or below 200, and the projection for the end of this year is that they be down to 80. That causes some angst among many others who look at that number, and my sense is that that number will go up, but it can only go up when we know what the follow-on project will be, but clearly not employing, you know, all of the scientists who lost jobs at that site even.

Mr. HASTERT. So there is some long-term plan to keep that site operable and some type of research being done?

Secretary O'LEARY. Yes, I want to be a lot more precise than I generally am in my language selection, and I want to just say this. Clearly, the collider project is terminated and we are moving toward termination. The direction that I received was to find a follow-on project. The numbers that I have talked about in terms of the budget support for that effort are de minimis compared to what we had been using to support the collider itself, \$20 to \$40 million per annum compared to the 490 in this past fiscal year's, so that gives you some grasp of the contemplated size of any follow-on project.

Mr. HASTERT. What is actually there—physical plant, some buildings and the tunnel that is about one-fifth completed?

Secretary O'LEARY. Yes, that is correct, and equipment that had been used in the cryogenic work that was being done and lots of—I call that deep freezing.

Mr. HASTERT. Right. Cold stuff, right?

Secretary O'LEARY. There, you have got it, cold stuff—and some magnet work as well.

I would like to be able to recount for you the numbers of square acres in development, but the fact escapes me and I can provide it when we clean up the record if you would like.

The major concerns, to go on just a bit, are to ensure that that tunnel is appropriately cared for, and for some that means filled;



also the requirement to do environmental work to ensure that whatever we leave in place is left in place or fractures sealed so that the requirements of the State and Federal environmental laws are met as well.

Mr. HASTERT. Thank you.

Thank you, Mr. Chairman.

Mr. SHARP. The gentleman from Idaho, Mr. Crapo, is recognized for 5 minutes.

Mr. CRAPO. Thank you, Mr. Chairman.

Madam Secretary, back to the liquid metal reactor again. When we were talking about it before, you indicated that the change in the Department's priorities and the shift of policy here toward the renewable, wind, and solar research was driven by market forces. I wanted to get into that with you and understand just what you meant by that because I am not familiar with any market forces that are driving a move toward one type of energy as opposed to another.

There may be policy decisions made by the administration which would drive us toward one type of energy versus another, but it is my understanding that the question of energy and the projections of the energy needs of this country exceed what could be accomplished within the reasonably short-term future if that is the time frame we are talking about for solar, wind, and other renewable sources as well as any other option, which is getting back to my basic point of: Why are we excluding one option which is now delivering 20 percent of the energy consumption of the country?

Secretary O'LEARY. I would say this. Perhaps you and I are in the same place as we attempt to focus diverse supplies for energy in the United States, and over the long term we have learned that that is the most important piece to do.

I don't think it makes sense to look at a 1-year or a 2-year budget, and what I attempted to do as I prepared for these hearings is quantify what we have spent for each of the energy sources over time, which of course might improve your comfort level but for the fact that you see a trend for diminution in support of nuclear power.

I am very comfortable with where we are today when I look at overall expenditure over time, and what I have done is taken a look back to 1977 when I first walked into the new Department of Energy after having worked some time in the FEA.

Having said that, I would point you up not to lose the fact that we continue a very strong and vigorous support in this budget in my mind for both natural gas and fossil energy, though you will see the fossil piece to be more on the R&D side, and when I look back to the work that has been done in nuclear power, I am not embarrassed at it, I am simply concluding that the market no longer prefers that as a traditional source to be used in the short term, and it occurs to me that it is time to put our money where the market seems to be going both here in the United States and broadly in Southeast Asia and China, and Eastern Europe and certainly in Russia, and did I leave out South America. And so that is where the balance has been for this time, and you and I can go round and round on this dance, and I am going to come back to the same place, and so will you.

Mr. CRAPO. I guess that is probably true.

Secretary O'LEARY. Fair enough.

Mr. CRAPO. But I would like to explore it a little more.

Secretary O'LEARY. Fair enough. I am here. I am going to be here. I am going to be here, sir.

Mr. CRAPO. You know, as you talk about market forces, I would like a little more clarification of that, because, as you are aware, the Japanese are willing to put millions of dollars today into the advancement of the liquid metal reactor research. California is looking at that very closely and is willing to look at it as a source of energy is my understanding, and I am not sure, when you say "market," I am still not sure whether you are talking about the same thing that I am hearing. Are there studies that show that there are market forces, is there information, or are we talking about policy decision changes?

Secretary O'LEARY. I am talking studies having been done by the International Energy Agency, by groups, you know, traditional soft path albeit, but also with respect to market penetration that we have already seen and experienced.

We have gone further in energy efficiency, and this work wasn't begun, you know, in our tenure in the Clinton administration but was done early on in the prior administration to sit and talk with large energy users to understand not only what their plans are for the near term as one can get them by simply reading the data that they are marketing or R&D associations make public, but by talking to them about what their visions are for the future well beyond reporting, and everything I read and everything I know of my own personal experience tells me I don't see a new order for any nuclear power plant contemplated in the planning horizon available, and nobody in anecdote tells me that that is desired.

Mr. CRAPO. Well, maybe if you could—and I certainly would like to see them—I would like to see any studies that you may be aware of, if you could make those available to me.

Secretary O'LEARY. We would be pleased to provide those to you, and I suspect can do it by close of business tomorrow.

Mr. CRAPO. Thank you very much.

Mr. SHARP. The time of the gentleman has expired.

The gentleman from Massachusetts will be recognized for 5 minutes, and then we will come to the distinguished ranking member of the committee who has joined us.

Mr. MARKEY. I thank the Chair.

One piece of information that has come to our attention is that during some unspecified period of time 2,300 calls were logged in on the radiation experiments hotline. Of those 2,300 during this period, 18 were referred to HHS. Do you have a breakdown of how the hotline calls have been referred to each agency?

Secretary O'LEARY. Yes, I do, and now I am operating from recollection.

Mr. MARKEY. You don't have to do it by—could we have a breakdown of that?

Secretary O'LEARY. Oh, absolutely. You would just rather have us file it?

Mr. MARKEY. Yes, that would be great. If we could just get a copy of that, that would be great.

Secretary O'LEARY. My people are going to hate me.

Mr. MARKEY. With regard to record retrieval, we also assume that there are any number of career or long-term bureaucrats at DOE who may be impediments to the full gathering of all of this information. Could you characterize briefly for us what that situation is and what you need to do in order to ensure that conflicts of interest have been removed to ensure that we get information about DOE and their contractors. Do you have a policy in place for those conflicts of interest?

Secretary O'LEARY. We have a policy in place and clear directives with respect to record destruction both coming from me and coming from the White House as well for the broader community and for the people at the Department if my note doesn't get it.

I think, Mr. Markey, I need to be heard to say this, and I believe it, I am not just uttering it. I don't wake up every morning with the sense that people at the Department are venal or evil, and my clear sense is that the people who are doing this record review work are dedicated servants of the public.

More important, at Hanford and our other facility—I am blocking; if someone will whisper it to me—Nevada, we have had excellent experience in record retrieval.

Mr. MARKEY. I agree with that. What I am saying is that the subconscious may be at work, though. They may be, in other words ostensibly dedicated to finding the results but, being married to a psychiatrist, I know there could be a lack of ability to have insight into their own problems.

I am being serious now.

Secretary O'LEARY. I know you are.

Mr. MARKEY. This is a very, very, very serious problem. I am very afraid, I am very concerned about obstruction of the gathering of information which victims need out there, and I just want to make sure that we have a very clear policy. I don't assume that people—

Secretary O'LEARY. We have got a very clear policy, we have got a clear procedure, we have got excellent experience at Hanford in record retrieval, we have got excellent experience that we are replicating all over, but I don't think I would get my work done, nor do our people, to hear their Secretary of Energy agree with you that in the subconscious as operating on the part of the people who are doing this work—

Mr. MARKEY. We just need the right people in charge, in other words. You can't have people who have track records in those areas then doing the investigation. If it is found that they have track records going back, then they are not the right people at all.

Secretary O'LEARY. I understand.

Mr. MARKEY. That is what I am saying. As we go into each one of these areas, it is helpful if a different person than has a stake in the history be doing that particular assignment. That is all.

Secretary O'LEARY. I am hearing your right. I think we have met it.

Mr. MARKEY. All right.

Secretary O'LEARY. And enough said by me.



Mr. MARKEY. I understand that the Human Radiation Advisory Committee is scheduled to submit an interim report 6 months after the advisory committee's first meeting. When is the first meeting?

Secretary O'LEARY. I am hoping within weeks. The issue is the vetting of those advisory committee members, aside from the Chair who has already been vetted, and my understanding is that that should be completed shortly at the White House.

Mr. MARKEY. Is it your intention to give us something before we adjourn for this year in Congress, or could this slip past our adjournment date? Because you are getting closer and closer to the point where that 6 months will be triggered after we leave here, and I would hope that we have something, even if you have to truncate it down from 5 months to 4 months after your first meeting, that we get something back.

Secretary O'LEARY. Here's the thing that concerns me, the integrity of the committee members who are clear that they have a desire to be independent, and so I will—if it appears that I need to negotiate down that timetable, I will endeavor to do it. But on the other hand, if they tell me that the quality of what they are delivering to you would be inadequate, then I will have to find some other way to give this committee the information it needs, but I understand the problem.

Mr. MARKEY. It is very important to us to have some resolution this year, at least on an interim basis, that is formal with regard to what it is that has been identified by this advisory panel.

Last Friday, DOE issued a new set of proposed regulations concerning the efficiency of eight types of consumer appliances. As you know, back in 1987 Mr. Sharp and I moved legislation that mandated that most family appliances be upgraded in terms of their efficiency. Why? Because most nuclear power plants, most oil-fired generating plants, or just the cumulative demand of lights and refrigerators and stoves, and if there is a doubling in the energy efficiency of lights and refrigerators and stoves, then you need that much—those many fewer nuclear or oil or gas-fired electrical generating facilities. It makes sense. So we mandated that in 1987, and the estimate at that time was that 20 Seabrook-size nuclear power plants, 1,000 megawatts, would not be needed for our country between the year 1987 and the year 2000 because of the reduced demand by these appliances.

In the 1992 Act, this subcommittee mandated additional appliances—I am quoting—including electric motors and others also be upgraded.

Last Friday, to your credit, DOE issued a new set of proposed regulations concerning the efficiency of eight types of consumer appliances. That would be the first time since the Energy Policy Act was enacted in 1987 that these standards would be tightened. I support you. I think it is very important. I think it really helps to, again, use the resources of the Department of Energy in an area that helps our country to work smarter and not harder in the use of limited energy resources, and I think a nominal investment helps us to move forward, and I would, one, want to tell you that I would like to be continually helpful to you in your approaches because I think here as well as in your work in helping to move the Department of Energy into the post-Cold War era you have been

a visionary in helping to reshape the way Members of Congress, the public, public policymakers, and industry view these energy-related issues, and I, for one, am a big fan.

Similarly, when the Japanese construct a character called Pluto Boy to downgrade the potential dangers from plutonium in their program, I think you are well advised to be skeptical and critical of their glamorization of this route that Japan and other countries might take, and I think you are helping to lead the world away from that very dangerous path, and I thank you.

Mr. SHARP. The time of the gentleman has expired again, and the Chair now recognizes the distinguished ranking member of the committee, Mr. Moorhead of California.

Mr. MOORHEAD. Thank you.

It is good to have you here, Madam Secretary.

Secretary O'LEARY. It is nice to see you, Mr. Moorhead.

Mr. MOORHEAD. I bet by now you are hoping this is coming close to an end.

The Renewable Energy Production Incentive was authorized by the Energy Policy Act of 1992. The program allows power systems and rural electric cooperatives to apply to the Department to receive payments of 1½ cents per kilowatt hour of generation from certain new renewable facilities for up to 10 years.

Although the Department was appropriated funds for REPI in fiscal year 1994, the Department is yet to issue regulations setting forth criteria for qualifying facilities. You know, in my State of California, there is an awful lot of that kind of work that is taking place.

How much of the \$3 million allocated to REPI in the fiscal year 1995 budget request do you anticipate would go to make project payments for fiscal year 1995?

Secretary O'LEARY. Mr. Moorhead, the regs that are now languishing in the Department, I am told by Mr. Stewart, a long-time warrior in this area, they will be out in 60 days. My expectation is that we can consume the funds then that we have asked for because we wouldn't have if we couldn't have.

Mr. MOORHEAD. How much of the fiscal year 1994's \$1.6 million was set aside for project payments? Do you know?

Secretary O'LEARY. Mr. Moorhead, I am embarrassed to say I am not certain, but if you will be as gracious as other members of the committee and permit us to provide that for the record, we will do it before close of business.

Mr. MOORHEAD. For the time being, I am on the wrong subject. That can happen. That is all right.

I wanted to ask you a couple of other questions that I would like for you to include the answers for, and that is, what did the Department do with last year's unobligated fund? The energy and water appropriation for fiscal year 1995 committee report directed the Department to use unobligated funds for project payments. Were these funds transferred to another DOE program?

And the last question that related to this subject was: What has delayed the rulemaking? When will the notice of proposed rulemaking be published? You have already given the answer for that.

Secretary O'LEARY. Yes.



Mr. MOORHEAD. Going on to another subject, assuming that we must fully fund the programs contained in the President's climate change action plan so that we will see real reductions in greenhouse gas emissions, are all of the programs established in the President's climate change action plan fully funded in the Department's fiscal year 1995 budget?

Secretary O'LEARY. Yes, sir, they are fully funded, and you may recall that at the time we were pulling together this plan and it was apparent that the lion's share of funding for a global climate change initiative would come from the Department, I was not then so clearly aware of the fact that there would be no addition to the budget in support of them. So I went forward clearly with a goal in mind of accomplishing the targets that we had set.

When I later discovered that we would, in fact, be accommodating those requirements within our budget, we did so willingly, because, quite frankly, most of these programs come right out of the Energy Policy Act that the Congress passed in 1992, so we are, in fact, accomplishing the goals set out by the Congress as well as the initiative set forth in our plan.

Mr. MOORHEAD. So in response to a question on updating us on how the joint implementation pilot program is progressing, you would say it is going along?

Secretary O'LEARY. Well, I have to say this fairly. One, we have just submitted our implementation plan in Geneva last month, only 20 days ago. I could not tell you that we were fully yet up and running with all of these programs, but to the extent that we have moved forward on those for which regulation was already in place, I would tell you that this area of energy efficiency and renewable energy is working both with renewed emphasis and, perhaps most importantly, with measures so that the next time I appear before you I will show you exactly what we have done.

Mr. MOORHEAD. Your Department was happy to notice reflecting a commitment to ensuring continued viability of our domestic oil and gas industry. The oil prices are really at one of the lowest levels they have been in 5 years. Does the Department anticipate taking additional actions in light of these lower oil prices?

Secretary O'LEARY. Well, Mr. Moorhead, I discussed that with Mr. Synar before you arrived indicating that—well, I wasn't as pointed as I am going to have to get now, but let's see if I can do that.

It is clear to me that there is very little the Department alone can do to intervene in the world oil marketplace to affect price absent some legislation proposing a floor and the like. I have said repeatedly, it is clear to me that this will not occur this year. We are still repairing from the bruises of the Btu tax as well as the gasoline tax. What we have committed to are a number of initiatives that this administration has indicated that it will study and make proposals resulting from those studies. We will clearly go forward with that.

Earlier today, we discussed some relief that might be offered and things like the reauthorization of the Strategic Petroleum Reserve. Clear, there are some tax incentives desired, and we have been discussing those with the industry as well, and we will work on those and hopefully before the year is out have some proposal to make.

Though I don't want to mislead you, they will be modest, but we are trying to work with both representatives from the public and industry as well to come up with something that will make sense and will be well received by the Congress.

Mr. MOORHEAD. The big problem is that, especially in old fields like we have a lot of in California, if the price goes too low, they shut them down, and then they are very difficult to ever open up again, and you lose a tremendous amount of resources that our country has, especially when our oil is so heavy and the Alaskan oil that some of those same criteria—

Secretary O'LEARY. I am understanding that, and I am also tracking, as I am sure you are, the number of shut-in wells that are occasioned each month that prices continue to be low and trend further downward.

The other thing that was discussed before you got here was our analysis of the impact on lifting the prohibition on exporting Alaskan crude, which is an analysis which should be completed before the spring is over and will permit us to engage in some dialogue and discussion with the public and the Congress generally. That might certainly help California.

Mr. MOORHEAD. It would, especially since it doesn't make sense that oil can better be exported to Japan as we buy other oils some place else that there is less transportation cost for, and it can be economically an advantage.

Secretary O'LEARY. Understood, Mr. Moorhead. You and I and many others need to engage this discussion and try and educate others as well.

Mr. MOORHEAD. Thank you.

Mr. SHARP. The Chair is going to give us each another shot at this, if you will bear with us, Madam Secretary.

Let me just reiterate what you are saying about the Alaskan oil ban since I raised it earlier, and of course we will welcome your analysis. I am operating on the assumptions that many are making that that is probably one of the more realistic things that we can do that would actually help domestic production. Obviously, it helps domestic production in California, but that production market has been depressed, many people believe, because we forced the oil from Alaska to go to California by not allowing it to find the most efficient place to be sold on the world market, and what you are facing, let me say, not to educate you but to help, to the extent there is any public—anyone listening—understand that this issue of how to help American production is, in fact, a very complex one if you wish to have any real impact.

The previous administration, which was believed to be very pro-production, had enormous difficulty coming up with any explicit proposals to do so. It simply is a matter of your philosophy and the reality of how much Government intervention you are willing to promote and how much Government intervention people are willing to accept, because it takes a terrific Government push to really change this market, and that really means putting a floor on price or raising the price either through taxation or through an oil import system, and those, frankly, are not things that the industry itself is agreed upon, that they agree with. They have intensely fought over this for the last 25 years within the industry, and there

are elements of it that continue to lobby for it and get their hopes up, and I just don't think we should realistically mislead those elements of the industry to think that suddenly we have a magic way, and you alluded to the fact that a very modest tax was viewed as an unbelievable Government intrusion into the marketplace.

The issue of SPRO was raised as a possibility—it has been for the last 15 years—as a way to purchase some healthy independence, or the stripper oil wells. Well, of course today when the Department buys oil, it can buy it from those folks. They can sell. I would love to be able to say that that is the only oil we use, but the market is so fungible, that probably wouldn't make any difference anyway, even if you could give them the exclusive rights to sell it.

But the big problem with SPRO, as we already talked about is, the money is not there, and the oil industry was among those that most intensely fought an alternative way of funding it, which was to force them to put oil—and which really was a tax, I mean we didn't have the jurisdiction over taxes, but we tried to be up front and tell people, they simply would kick in money, the consumers would ultimately pay for it at less than half a cent a gallon, but it would be a fund of money that could buy oil, that could have been used to buy stripper oil or buy oil from independents, but that is not available.

So as these folks look to you for leadership, they must also look to themselves and to their colleagues in business who have always fought the very mechanisms that might be able to help them out. So I don't think the Department, as it struggles with this, should feel guilty if it is not able to come up with proposals that will genuinely change the outcome of production.

The only other avenue, of course, is to open up public lands. That might be a fruitful place, and that is another almost political no-no. We have most of the OCS shut in, and we have Alaska and other places shut in, and my own view is that we could have a few more areas open if we had been able to carry off an environmental industry negotiation in this country, but the various efforts at that have gone awry over the years, as many people who know the history are aware.

I couldn't resist the chance, Madam Secretary, to see these issues reemerge every time, and the criticism always goes to the administration, the Department, of: Why don't they recognize the importance of independents? Why don't they recognize the importance of the stripper wells? Why don't they do this or that? And the fundamental reasons are that there is both absence of economic and political support in the oil industry itself, in the Congress, and all the speeches in the world haven't been able in 25 years to turn that around.

I personally would not object to us trying to raise the price level somewhat in this country, but this isn't the year it is going to happen, it probably isn't going to happen in the next 3 or 4 years in the absence of some real crisis.

Let me turn to one that is going to be equally difficult, if I might, and that is low-level nuclear waste. My colleague from Illinois, Mr. Hastert, was asking about it, and I think it may be important to reiterate the fundamental theory behind this because the theory



was, when Congress adopted the low-level nuclear waste policy, that this would be a State responsibility, that the Federal Government has taken the responsibility for disposal of high-level nuclear waste, military and civilian, but that low-level nuclear waste remains the responsibility of the State governments and they would be able to handle it, and I think the indications from many State governments at that time was certainly they would do that.

As you know, the deadlines have been missed. But we are facing, as I understand it, a deadline in June in which basically all across the country is at the mercy of the State legislature of South Carolina because South Carolina is now the only place open at Barnwell to be able to receive the low-level nuclear waste.

Very high surcharges are being paid by hospitals and everybody else on the wastes that they have as a part of the penalties for States that have been unwilling to find a site, and we somehow have to convince the State legislature of South Carolina or perhaps go back to Idaho, which probably is not very well open to this proposition—

Secretary O'LEARY. Trust me, that is not the place to go.

Mr. SHARP [continuing]. To see about that.

But there is one place where I think the Federal Government must take, if we are able to sustain this policy, and for the time being it strikes me that the smart thing to do is to try to keep the pressure on the States to continue to solve it. But one State is in the process of solving that, and I think the Department of Interior wants to take great care that it does not undermine that progress in the California site. There is no site that exists anywhere or will exist in which one cannot envision intense opposition, and there is no circumstance that anybody is able to envision unless we are shooting it to the Moon, and perhaps that would be objected to as well—in which local political leaders will feel compelled to fight it, and we have a site in California that the Governor has endorsed. They have come to reluctantly, of course, the need to do this, but they have all come to it. But the opponents find openings perhaps here in the Federal Government to try to undo that.

I hope that the focus within the Department of Interior will be strictly on the scientific questions and not the need to meet somebody's political agenda, and this becomes very important because I have a hunch the capacity to influence South Carolina may be somewhat caught up in the argument of whether or not anybody else anywhere will take any responsibility.

In the absence of that, Madam Secretary, there will be a horrendous political battle on Capitol Hill to figure out who to force to take this, because it is not going to be long, it is my understanding, before everybody from the hospitals to the utility industry and all kinds of places that many of us can't even envision—I was so surprised to run into an NRC inspector in my own district in a rural area. It was at a hospital. It just hadn't dawned on me that the NRC was supervising their affairs—and that out of the woodwork Members of Congress are going to find people lobbying them to do something about low-level waste.

And this little lecture you don't need, because I know you are painfully aware of it, but obviously everybody has got to be thinking about how we are going to approach this. It is an enormous po-



litical conundrum, but the one thing I know we don't want to have the Federal Government do is take an action that inadvertently or deliberately jeopardized what little progress we can count on.

Secretary O'LEARY. I hope you have had this discussion with others.

Mr. SHARP. Well, we have been trying to have this discussion with others.

Secretary O'LEARY. Fair enough. I as well.

I just would point out to you that North Carolina, I believe, has made extreme progress in this past year having gotten an application and all the regulatory work done and presented to the State for the site that they named in December, and my fear is that if we don't have progress on other fronts, North Carolina will now back off as it may tend to see no progress elsewhere, leading to dire circumstance in that one site in progress and none others. So I am well aware of this very tender issue, and I am also aware of the fact that I need to help it along very quietly and not exacerbate it.

Mr. SHARP. Well, I think that is right, and it may be worth reiterating because it may not be known, but for the sake of the folks in North Carolina who have had the courage to come up with this and/or other States along the way struggling, but it has been the active, deliberate policy of all of the subcommittee engaged in this issue over the last decade that they would not consider changing the Act and undermine those people who are responsibly stepping forward, and my belief is that will remain the view and the danger of even talking about it is leaving the impression that there will be some easy out.

I don't know anybody who knows a way in which the Congress could get agreement or what that agreement ought to be as to where to put it. The State of Nevada is not offering itself up, and no one else is either.

It is supposed to technically not be a difficult problem, unlike the high-level nuclear waste, but it has become an enormous political problem.

Well, Madam Secretary, you and I are the only two left. I appreciate very much your time and attention to this. I want to reiterate how pleased many of us are with the new directions in the budget in a tough fiscal climate, and we want to help you be successful here on Capitol Hill. Thank you very much.

Secretary O'LEARY. Thank you very much, Mr. Chairman.

[Whereupon, at 11:45 a.m., the hearing was adjourned.]

[Responses to subcommittee questions from the Department of Energy follow:]

## QUESTIONS FROM CONGRESSMAN SHARP

Climate Change

Question 1: The Administration's analysis of the President's Climate Change Action Plan (CCAP) assumes that the Energy Policy Act (EPACT) is fully implemented as a baseline. The Climate Change Action Plan consists of additional initiatives. Together the EPACT and the CCAP will get us to the President's goal of returning to 1990 emission levels by the year 2000.

In your view, does the President's budget request fully fund both the CCAP and EPACT? Are you and the Administration putting on a full court press on the Congress to fund your requests? What will the consequences of the failure of your recent reprogramming request be? How do you propose to get started on the "Motor Challenge" program, "Climate-Wise", "Climate-Challenge", and the "Rebuild America" initiative?

Answer: Within the current fiscal constraints, the President's budget reflects the funding level required to aggressively implement all high priority actions under EPACT. High priority actions are those which are mandatory requirements, have near-term deadlines, have sufficient appropriations, have modest out-year funding requirements or will result in substantial energy, environmental or economic benefits. As EPACT will take many years and resources to fully comply with the intent of the legislation, our current budget request reflects a substantial down payment towards the Department's compliance with the Energy Policy Act. We have requested approximately \$500 million in FY 1995 for implementation of the EPACT and are working with Congressional staff to ensure that priority items are funded. The DOE FY 1995 budget request for the Office of Energy Efficiency and Renewable Energy funds the energy efficiency and renewable energy actions in the President's Climate Change Action Plan (CCAP) at about 90% of the originally planned level in the CCAP report. With the

exception of two small CCAP initiatives, the request funds and extends key provisions of EPACT. The Climate Change Action Plan builds upon EPACT by attempting to accelerated the deployment technologies into the marketplace. The attached table shows the CCAP budget by action and the relevant EPACT sections. The budget for EPACT implementation is contained within our base.

The Department of Energy is working closely with members of Congress and staff to explain how the requests will translate into tangible near- and long-term economic and environmental benefits for the American people. As part of this effort, we developed last year detailed implementation plans for each major EPACT provision. Since the release of the CCAP late last fall, we have also developed detailed draft implementation plans for each of the 25 actions for which DOE has lead responsibility.

We recently released the CCAP draft plans to Congress so that Members could better understand the nature and anticipated results of these initiatives - including goals, implementation strategy, milestones, metrics, partners and budget. As the Secretary and other DOE officials have testified, these programs represent solid investments in economic growth, jobs, environmental quality and competitiveness.

The purpose of the reprogramming request was to secure funds for the early start of selected CCAP initiatives that are ready to implement immediately - in particular Motor Challenge, Climate-Wise and Rebuild America. The failure of this request has resulted in the delay of full implementation of these programs and the Department must press harder to achieve the U.S. carbon

reduction goal for the year 2000.

The Sustainable Energy Budget coalition, with our support, held a major press conference to indicate their commitment to working with the Congress to secure support for the Plan. The Secretary also held several press conferences in support of the budget. We are aware of the broad basis of other support for implementing the Climate Change Action Plan and are confident that utilities, suppliers and service companies, States, environmental organizations and others are prepared to communicate their support to the Congress.

While the Department cannot begin full execution of these programs due to the lack of appropriated funds, we are working with our external stakeholders to further develop and refine our implementation plans. This planning will enable us to move forward as quickly as possible when we receive appropriations for these programs.

CCAP Budget by Action and Relevant EPACT Sections  
(\$million)

| <u>CCAP Action</u>                       | <u>FY 1995 Request</u> | <u>EPACT Sections</u>                |
|--|------------------------|--------------------------------------|
| #1 Rebuild America                       | \$20.0                 | 2104                                 |
| #3 State Revolving Funds                 | \$11.0                 | 141                                  |
| #4 Cost-Shared Demonstrations            | \$10.0                 | 122-128, 152(h), 1202,<br>2102, 2104 |
| #5 Information and Training              | \$3.4                  | 101, 121, 125-128, 157               |
| #6 Golden Carrot Partnerships            | \$15.0                 | 102, 127, 128, 2102,<br>2104         |
| #7 Residential Appliance Standards       | \$0                    | 123, 126                             |
| #8 HERS/EEMS                             | \$1.5                  | 102, 103, 105, 106                   |
| #9 Cool Communities                      | \$2.2                  | - -                                  |
| #10 Building Standards                   | \$14.0                 | 101                                  |
| #11 Residential Energy Programs          | \$6.8                  | 104, 2104                            |
| #12 Motor Challenge                      | \$3.5                  | 2105, 122                            |
| #13 Industrial Golden Carrots            | \$2.0                  | 2105                                 |
| #14 Accelerate Efficient<br>Technologies | \$8.5                  | 132, 2103, 2105, 2107<br>2202        |
| #15 Expand and Enhance EADCs             | \$3.5                  | 132, 133                             |
| #16 Accelerate Pollution Prevention      | \$5.5                  | 2108, 2103, 2106                     |



|                                  |        |  |
|----------------------------------|--------|--|
| #26 Renewables Collaboratives    | \$65.0 | 2111, 1202   |
| #27 Integrated Resource Planning | \$6.0  | 111, 112, 115                                      |
| #29 Transformer Standards        | \$0    | 124  |
| #37 Landfill Gas Outreach        | \$0    | - -  |
| Climate Wise                     | \$6.0  | 111, 115, 132, 1605,<br>1608, 2108                 |
| Climate Challenge                | \$0    | 111, 115, 124, 131, 132,<br>2106, 2108, 2111, 1605 |

#### Domestic Clean Coal Technology

Question 2: Are you proposing to cut overall funding for the clean coal technology program, or are you merely stretching out the program? When will this program be completed and what does "completed" mean?

Answer: We are not proposing to cut overall funding. Rather we are proposing to stretch out funding to be consistent with the timeframes within which funding will be required to implement the remainder of the program. Based on current project schedules we estimate that the program will be completed in 2005, when the last project completes cost-shared operation and final reports are published.

#### Clean Coal Technology Export - S3

Question 3: The clean coal technology export initiative in the President's budget request is a potential win-win for the environment and for American business. Can you provide a more detailed explanation about your plans for this program?

Answer: New Initiative for FY 1995

The following provides a statement of objective and a brief description of the elements of the proposed activity, plus a summary of funding required by year. The total proposed cost is \$100 million.

Objective: Provide cost sharing for U.S. content of commercial projects employing clean coal technology to improve efficiency, reduce pollution, and create American jobs through the stimulation and export of U.S. goods and services

In China in the next 20 years, it is estimated that 320 GWe of additional electric generating capacity will be needed, of which 204 GW will be coal fired. This increase in coal-fired generating capacity represents a market of \$36 billion for new clean coal technology power plants and the potential to create 16,800 jobs in exporting countries. Eastern Europe represents a potential to upgrade 80 GW of coal-fired power plants; there is an export market of \$8 billion, representing 3,300 jobs in exporting nations. Proposed activities:

|  | <u>Funding (\$MM)</u> |             |              |
|--|-----------------------|-------------|--------------|
|  | <u>FY95</u>           | <u>FY96</u> | <u>TOTAL</u> |
| a. China Advanced Coal-Fired Power System Project                      | 19                    | 31          | 50           |
| b. Eastern European Coal-Fired Powerplant Upgrade Project              | 1                     | 24          | 25           |
| c. Cost Shared International Clean Coal Project Development Activities | 0                     | 25          | 25           |

This new initiative will be accomplished with funds previously appropriated for the Clean Coal Technology Demonstration Program. U.S. funds will be applied to the U.S. content of the project and will be leveraged.

The first two initiatives identified above (a. and b.) are consistent with the Joint Implementation Initiative that is included in the President's recently announced Global Climate Change Action Plan.

Both initiatives support the introduction of clean coal technology in regions of the world (China and Eastern Europe) where there is need to enhance energy efficiency and control pollution. The situation is different in the two regions: China faces the prospect of the highest growth in demand, while in Eastern Europe the capacity is more than adequate to meet economic objectives but the facilities need to be upgraded.

The third initiative (c.) also implements Section 1332 of the Energy Policy Act of 1992.

Following is a brief description of each element of the proposed activity:

- a. China Advanced Coal-Fired Power System Project
  - DOE will cost share approximately 25 percent (approximately 10 percent of project cost) of the differential cost of Integrated Coal Gasification Combined Cycle (IGCC) technology over the cost of conventional coal-fired power generation technology used in China.
  - The Chinese would provide at least the equivalent of the cost of a conventional power generation technology. The remaining costs would be provided through debt and equity.
  - The project would be approximately 350 - 400 MW and would utilize the most up-to-date technology. It would be a world class "showcase" demonstrating the highest efficiency and cleanest coal facility economically and commercially possible.
  - China is rapidly moving power generation into the free market through a program to increase tariffs to reflect the cost of power including debt service. This will encourage the application of the more efficient and environmentally sound IGCC technology.

- The objective of the program from the U.S. perspective is to get maximum U.S. content, to encourage the Chinese to select the most effective projects, and to encourage projects that enhance the efficiency of electricity production and reduce greenhouse gas emissions.
- The Chinese market potentially represents \$35.9 billion in exports of power equipment and services for new clean coal technology power plants and \$3.8 billion for coal retrofit projects over the next 20 years. This market also offers an opportunity for the creation of approximately 16,800 total jobs in exporting countries for new applications and retrofit projects.
- The Chinese recognize the need to develop cleaner power generation facilities and are beginning to implement restrictions on planned facilities.
- A driver of the demonstration is to encourage projects that can qualify as joint implementation initiatives involving international disposition of credits for reducing emissions of CO<sub>2</sub> and NO<sub>x</sub>.
- The funds for this project will be from available funds for the Clean Coal Technology Demonstration Program and will not be performed at the expense of any currently authorized project.



## b. East European Coal-Fired Powerplant Upgrade Project

- DOE will share up to one third of the cost of pollution control equipment for a powerplant upgrade project.
- A powerplant upgrade project consists of a project that involves modernization of a powerplant (life extension), pollution control ( $SO_2$ ,  $NO_x$ , and particulate control) and increased efficiency and reliability. There is a potential to upgrade approximately 80,000 MW of coal-fired capacity in Eastern Europe. The potential upgrades represent an export market of \$8.0 billion and the potential generation of 3,300 jobs to exporting nations.
- The criteria that DOE uses will be to support projects that are most cost effective (including maximum increase in efficiency) and are hosted by utilities that agree to implement reforms to achieve transition to a free market approach to the production, delivery and pricing of electricity.
- The objective of the program from the U.S. perspective is to get maximum U.S. content, to encourage the Eastern European utilities to select the most cost effective projects, and to encourage projects that enhance the efficiency of electricity production.

- A major driver of this activity is to encourage projects that can qualify as joint implementation initiatives involving international disposition of credits for reducing emissions of CO<sub>2</sub>.
  - The funds for this project will be from available funds for the Clean Coal Technology Demonstration Program and will not be performed at the expense of any currently authorized project.
- c. Cost Shared International Clean Coal Project Development Activities
- Under the structure of Section 1332 of the Energy Policy Act, a fund would be created for cost sharing, with U.S. industry, the costs of project development for foreign projects for the purpose of encouraging the use of U.S. technology and services.
  - Project development is high risk, especially for overseas projects where the development cost could be five times that for a U.S. project. Many small and moderately capitalized companies with U.S. clean coal technologies are limited in the ability to enter the foreign market due to these front-end development costs. Even large companies have limits on high risk capital.

- The government cost sharing would mitigate the risk of the development cost and would enable U.S. firms to compete in more overseas projects. One of the main goals of Section 1332 is to provide financing to enable U.S. firms to be more competitive.
- The only source of project development funding is the Export-Import Bank through loans which must be repaid whether the project proceeds or not.
- Restrictions on the flexibility of the use of the development funds will be defined by the ISM requirements. General Counsel for Treasury is reviewing the concept for consistency with the ISM requirements.
- A clarification of Section 1332 would need to be made in the appropriation language that the Buy America requirement applies to only the cost-shared activities, not the total project.

Question 4: DOE Laboratories: You recently announced that a blue ribbon commission would review the different options for restructuring the Department of Energy's (DOE) multipurpose laboratories, and report back to you by the end of the year.

Many in Congress have already committed to legislating on the laboratories this year, and the Department has previously urged enactment of S.473.

What should we do now? If we act now, we forego the benefits of this new review by your panel. If we don't act, your previous goal of restructuring laboratories, as proposed in S.473, would not be met. Do you urge enactment of legislation this year or would it be more beneficial to await the results of the review?

Answer: The Department supports enactment of legislation this year and does not favor awaiting the results of the Secretary of Energy's Advisory Board Task Force on Alternative Futures for the DOE National laboratories which will not submit its report until February 1995.

Acting now on S.473 would not "forego the benefits" of the Task Force review headed by Bob Galvin. In fact, S.473 will support the development of a structure that will better enable us to consider and implement the Task Force's recommendations. As you know, the Department will continue to improve the effectiveness and efficiency of its laboratories during the year long Task Force review. For example, the Department will also be implementing the recommendations of the Contract Reform Team and enhancing our commitment to a performance based management system for the laboratories during this period.

### Fermilab

Question 1: The Congressional vote to terminate construction of the Superconducting Super Collider (SSC) leaves Fermilab as the only United States laboratory with the capability for elementary particle physics research at the highest available energies. How does the FY95 Budget Request reflect the significance of Fermilab's role in maintaining U.S. scientific leadership in the absence of the SSC?

Answer: The funding requested in the FY 1995 Budget will provide substantial support for the operation of the Tevatron and for the research programs at Fermilab. The Tevatron at Fermilab accelerates protons and antiprotons to very high energies (the highest in the world) and causes them to collide in a controlled manner, thus providing the experimental conditions necessary for the world forefront research program being carried out at Fermilab. We believe that, within the total funding requested for the High Energy Physics Program, the funding proposed for Fermilab reflects the significance of Fermilab's role in the U.S. High Energy Physics Program and that it will allow Fermilab to maintain its position as the foremost High Energy Physics research institution in the world.



## QUESTIONS FROM REPRESENTATIVE SHARP

Fermilab

Question 2: In the House Appropriations Bill for FY94, Congress encouraged the Secretary of Energy "to make full and effective use of the resources of Fermilab, the nation's most active laboratory for high-energy physics research, and the only one now equipped to work at the energy frontier of the field." How does the current Budget Request, with what appears to be a 4% reduction in the General Science & Research operating funds for Fermilab, respond to that Congressional directive?

Answer: The funding allocated to Fermilab in the FY 1995 Budget Request does, indeed, show a decrease from FY 1994. We are mindful of the Committee's strong support for the Fermilab program, and we share that point of view. But within the overall budget stringencies related to the Administration's efforts to reduce the deficit and Departmental priorities, we were unable to fully respond to Fermilab's entire request.

## QUESTIONS FROM REPRESENTATIVE SHARP

Fermilab

Question 3: The Department of Energy has designated fundamental research "into the nature of matter and energy for future technologies and to maintain world leadership in science" as one of DOE's five "core businesses." How does the FY95 Budget Request support that priority as it applies to Fermilab, the only U.S. laboratory currently capable of sustaining world leadership in the science of high-energy physics?

Answer: The Department has a strong commitment to the support of basic research including High Energy Physics. As you note, fundamental research is reflected in the identification of Science and Technology as one of the Department's Core Businesses, and in the detailed objectives under that Core Business. We believe that investments in research and development have a strong influence on long-term productivity and high wage job growth. This requires that both government and industry significantly invest in basic and applied science and the facilities, infrastructure and trained scientists needed to support technological leadership. High energy physics is one of the key areas of basic research. Fermilab is one of our nation's forefront research institutions and has world unique capabilities for studies in high energy physics. Thus, the Department is committed to maintaining a strong U.S. High Energy Physics Program and for providing strong support for the research activities at Fermilab. Additionally, the Administration has set a National Goal of reducing the deficit. Accordingly, we believe the High Energy Physics budget request, and Fermilab's place within it, reflects a responsible balancing of these competing priorities.

Fermilab

Question 4: Of the approximately 2,200 U.S. physicists actively working in the field of particle physics today, about 1,300 or 60%, depend on Fermilab's resources to carry out their research. Do the reduced operating and equipment funds for Fermilab in the FY95 Budget Request make adequate provision for operating the U.S. laboratory most of America's physicists rely upon to conduct high-energy physics research?

Answer: We believe that, within the total funds requested for the High Energy Physics Program, the funding allocated to Fermilab makes adequate provision for operating that laboratory. We acknowledge that the proposed funding will require some slowdown and stretch-out of the Fermilab program, but we do not believe this will seriously impact the quality of the scientific program at the laboratory.

Fermilab

Question 5: Fermilab has begun construction of the Main Injector, an accelerator that will increase the Laboratory's research productivity by a factor of five. DOE reviews of the Main Injector have shown that the project could effectively obligate up to \$75 million annually in construction funds. Given Fermilab's central role in the U.S. program of high-energy physics research in the absence of the SSC, and the value added by the Main Injector, should Fermilab Main Injector construction be funded at a level that will allow operation to begin earlier than 1998, the date it would be completed with the current funding profile?

Answer: I fully agree that the Fermilab Main Injector Project is very important to the future of Fermilab and of the U.S. High Energy Physics Program. However, the necessity to balance priorities between responsible investment in future research capabilities and the goal of reducing the deficit did not provide for the allocation of additional funding that would have allowed a more aggressive schedule for project completion.

## Naval Petroleum Reserves

Question 5-1: Why is the Administration proposing another sell-off of the Naval Petroleum Reserve (NPR)?

Answer: The Administration wants to reinvent the government. That means we are trying to do more with less and get the most value of our assets. We are considering all alternatives at Elk Hills - better management through a new contractor, corporatization, lease, sale and farmout. While we are not pushing the sale this year, it remains an option that, in our view, deserves attention as a way to get the most value of the oil field.

Question 5-2: The Reagan and Bush budgets repeatedly proposed such a "Federal asset sale," but Congress never agreed to it. What are the costs and benefits of selling it barrel-by-barrel, as we do now, or all at once in a complete transfer?

Answer: The Department is working on the assessment you are asking for. We will share it with the Congress as soon as we have completed the analysis.



## Naval Petroleum Reserves

Question 5-3: Isn't it true if we sell it off barrel-by-barrel, we are at least getting a fair market price for it, but if we sell off the entire field (as DOE proposes), then we don't know if we have gotten a good deal or a bad deal -- because no one knows what future oil prices will be?

Answer: It seems to us you can get fair market value in either case. There is a market for crude oil, natural gas, and other hydrocarbons we produce at Elk Hills. The government can produce and sell these commodities and get a market price for them. But there is also a market for oil field properties. Several billion dollars worth of properties are bought and sold every year.

It is certainly true that no one knows for sure what the future price of oil will be. Therefore, one cannot be sure that an oil field's value might not appreciate in the future. One cannot be sure that oil prices will not fall, however, one can lose money by holding on to an oil field. (When oil prices fell from \$27 per barrel in 1985 to \$15 per barrel in 1986, all owners of oil fields including the Federal government, lost the chance to sell an asset at a much higher value.) The facts are that oil prices move up and down. An oil field in fact is a speculative piece of real property. One can, nonetheless, make a reasoned judgement, when a oil field is sold whether or not there has been active competition for the asset. If such competition exists, most analysts would conclude the government is likely to get fair value for the asset.

## QUESTIONS FROM CONGRESSMAN SHARP

Alternative Fuels

Question 6(a): In your budget, you call for a rather impressive increase in the number of alternative fuel vehicles to be added to the Federal fleet--15,000 vehicles, almost doubling the 20,000 which will have been purchased between FY 1993 and FY 1994. You have requested \$30 million for these acquisitions. How do you anticipate executing this goal? Is there any effort to study the performance characteristics and reliability of these vehicles?

Answer: The Department has established a coordinated, inter-agency effort to acquire and place alternative fuel vehicles as required under the Energy Policy Act (Section 303). Recognizing that Federal leadership on alternative fuel vehicle acquisition is critical to the increased use of alternative fuels, Executive Order 12844 increased the acquisition targets by 50 percent to 7,500 for FY 1993, 11,250 for FY 1994, and 15,000 for FY 1995. In FY 1993, the Department coordinated the purchase or conversion of approximately 6,500 alternative fuel vehicles. The Department received an appropriation of \$7 million to defray a share of the incremental costs of these vehicles. In FY 1994, the Department received appropriations of \$18 million and has worked with the agencies to develop plans for purchase or conversion of approximately 11,250 alternative fuel vehicles. Those plans are currently being re-evaluated due to the cancellation by General Motors of natural gas vehicles for 1994. GM has delayed the introduction of vehicles until later this year in

order to incorporate design changes due to the rupture of two natural gas cylinders on GM vehicles early in 1994. As a result of the cancellation, we currently expect that 7,700 vehicles will be acquired using FY 1994 funds.

For FY 1995, the Department is fully committed to meeting the President's goal of 15,000 vehicles. To execute the goal, the Department will continue its program to require each agency to identify candidates for alternative fuel vehicle acquisition. The Department will prepare and distribute guidance to agencies in the April-May time frame to collect information on planned types and locations of alternative fuel vehicles. Placement of vehicles will be focused through the Department's Clean Cities program in areas that have air quality problems (i.e., non-attainment areas) and have demonstrated a commitment to alternative fuels. The Department will work closely with the General Services Administration during the summer to prepare a solicitation for alternative fuel vehicles from the Original Equipment Manufacturers (OEMs). This annual solicitation is usually issued in September, with awards being announced in December. Once awards are made, agencies can begin placing orders for vehicles, subject to the availability of FY 1995 funding.

The Department has requested \$30 million to help defray incremental costs of these alternative fuel vehicles. In addition, the U.S. Postal Service plans to continue vehicle conversions (to natural gas) at a fairly steady rate of approximately 2,000 vehicles per year. The Postal Service uses non-appropriated funds to purchase or convert these vehicles, which complements the DOE appropriated funds. The Advanced Research Projects Agency--which has received \$25 million for natural gas vehicles, research, and infrastructure in FY 1993 and FY 1994--has not requested specific appropriations for alternative fuel vehicles in FY 1995.

In FY 1993, acquisitions included a mix of alcohol and natural gas vehicles, all OEMs. These acquisitions brought the Federal fleet total to about 10,000 vehicles, with approximately 50 percent natural gas and 50 percent alcohol vehicles. In FY 1994 and FY 1995 the planned mix includes alcohol, natural gas, propane, and electric. Of these vehicles, all the alcohol vehicles are OEMs. Natural gas vehicles include a mix of OEMs and conversions. Propane vehicles are currently all conversions, but the OEMs may have some models available for testing in model years 1995 or 1996. The electric vehicles acquired in FY 1994 are obtained in partnership with the Electric Vehicle Site Operators Program and are conversions. In FY 1995, additional electric



conversions are anticipated; however, the Department will consider any OEMs offered. The Department's planning for FY 1995 is that most of the 15,000 alternative fuel vehicles--approximately 11,000 to 13,000--would be OEMs, with the balance being natural gas, propane, and electric conversions. Most of the conversions will be performed by the U.S. Postal Service.

Each year, a representative cross-section of the newly acquired alternative fuel vehicles are selected and added to the an engineering test fleet authorized under the Alternative Motor Fuels Act (AMFA) of 1988, feeding performance, maintenance, and emissions data to the Alternative Fuel Data Center at the National Renewable Energy Laboratory. Currently, the Data Center has extensive information on the alternative fuel vehicles in the Federal fleet, including methanol, natural gas, and ethanol vehicles. In addition, the Data Center has collected information on methanol, natural gas, and ethanol transit buses in coordination with the Federal Transit Administration, and heavy duty trucks in conjunction with the American Trucking Associations. The information and evaluations obtained are made available to Federal agencies, industry, and the public to expand the experience and understanding of alternative fuel vehicles. The Data Center supplies information electronically via a sophisticated computer program available to anyone with a computer and modem. Information may also be obtained by calling the National Alternative Fuels Hotline (1-800-423-1DOE). A formal report on the AMFA program using the Data Center information is submitted annually to Congress.

## QUESTIONS FROM CONGRESSMAN SHARP

Hybrid Propulsion Development

Question 6(b): You have also requested an increase for electric and hybrid propulsion development. The majority of this increase would go to research on hybrid systems. What is the rationale for the shifting of priorities in this program from electric battery development to hybrid systems?

Answer: The funding requests for FY 1995 do not represent a shifting of priorities from battery development to hybrid systems, but reflect the resources required to carry on these programs as planned. The decrease in funding for advanced battery development is possible because of the anticipated termination of one or more mid-term battery development contracts in FY 1995 and the fact that the U.S. Advanced Battery Consortium (USABC) has carried over some funds from previous years due to the slower than planned initiation of new development contracts for batteries that will satisfy the long-term USABC objectives. Development of mid-term technology has progressed to the point where the Consortium is now evaluating some systems in vehicles. The hybrid propulsion development program is also given a high priority because of its near-term focus. The objective of this five-year program is to assist industry in the development of a hybrid vehicle that will double the fuel economy of conventional vehicles and satisfy the Environmental Protection Agency Tier II emission standards. Due to the near-term focus of the

hybrid program it is necessary to ramp up the two major development contract teams very rapidly to achieve their aggressive schedule. In FY 1995 the contractors will be moving from the design definition phase, primarily paper studies, into hardware development. Also, since the two contracts did not get signed until late FY 1993 and early FY 1994, some FY 1993 funds were carried over to supplement the FY 1994 appropriations. The hybrid program plan calls for prototype development by 1998; no commercialization activities are involved.

#### Battery Development

Question 6(c): In your view, what is the progress of the U.S. Advanced Battery Consortium (USABC)?

Answer: The U.S. Advanced Battery Consortium has put in place three programs to address the mid-term program needs, and three programs for the long term. Full vehicle size mid-term battery packs (made up of cells and modules developed in response to the 1998 Zero Emissions Vehicle mandate) are now undergoing testing at the Argonne National Laboratory and are also being placed in vehicles for field evaluation. The performance evaluations are ongoing at the proving grounds of the USABC partners. The success of the mid-term program can be best judged by the fact that in March of this year General Motors announced that it would work with the Ovonic Battery Company to further assist it in the development, manufacturing, and commercialization of its nickel-metal-hydride battery technology. Ovonic was the first battery development program funded by the USABC. Evaluation of the long-term programs is more difficult to assess at this time. Each long-term team represents

some of the best talent for this work in North America. These teams must be allowed two to three years to develop prototype batteries for evaluation against the program goals.

Question: The goal of this partnership program was to develop by 1994 a mid-term battery which could meet the 1998 Zero Emission Vehicle (ZEV) mandate. However, a recent report from the American Automobile Manufacturers Association states that no such battery is available and it may take another four years to develop. How is battery development progressing in view of the 1998 mandate, which will be effective in California and apparently in several Northeast States, including New York and Massachusetts?

Answer: It will be very difficult to get any of the mid-term batteries under development by the USABC into production in time for the 1998 mandate. None of these batteries is currently ready for pilot production. It will take from 48 to 60 months from the time the technology is ready for pilot production until actual production can begin. However, a number of developers outside of the USABC are working on improving near-term battery technology. This includes improved lead-acid battery technology from Delco and GNB, Horizon Battery Co., and others. European automobile manufacturers are utilizing nickel-cadmium and sodium-beta batteries in their prototype vehicles. The Japanese industry is also developing a wide variety of battery technologies. It is still too early to determine if any batteries other than lead acid will be available in production quantities at a reasonable cost in time for the 1998 mandate. Prototype vehicles from other than domestic manufacturers are being evaluated under a Cooperative Research and Development Agreement with the California Air Resource Board. At this time, none of these vehicles has an advanced battery.



Question: Is the USABC meeting its original goals, or should it reassess its function?

Answer: The USABC is behind schedule in meeting its mid-term goals by approximately one year. This is due to the complexity of contract arrangements with the battery companies and the process of learning how government and industry partners can work together efficiently, the results of which are documented in a report on "Lessons Learned Under the USABC." However, the Consortium is working very well, at the present time, and excellent progress is being made. Six contracts (three for development of mid-term battery technologies and three for long term development) are underway with battery developers and seven Cooperative Research and Development Agreements have been signed with DOE laboratories. In 1995 the USABC plans to select one or more mid-term batteries for pilot plant production. After the mid-term batteries are fully developed, it will take from 48 to 60 months to proceed through pilot production and field testing before full scale production can be initiated. Consequently, it is not likely that full scale production of mid-term batteries can begin before the end of this decade.

Question: Is the Department satisfied that it is allocating enough resources to the near-term late 1990s challenges that the ZEV mandate creates?

Answer: The Department believes it is allocating sufficient resources to the USABC to meet the challenges of the

late 1990s through its cooperative agreement. The agreement allows the industry to make the major decisions concerning the program and project priorities necessary to respond to regulatory requirements.

Question: In your opinion, will Detroit be able to market competitive, affordable ZEVs in the large numbers required by Fall 1997.

Answer: For electric vehicles to be competitive and affordable, advancements in battery technology are essential. At a minimum, these batteries must be able to satisfy the USABC mid-term goals for performance, life, and cost. None of the mid-term batteries under development by the USABC have advanced these objectives yet, although in some cases they are very promising. As stated previously, it will take from 48 to 60 months after the batteries have been fully developed to proceed through pilot production and field testing before full-scale production can begin. Consequently, it is very unlikely that a battery satisfying all of the mid-term USABC goals will be in production in time for large numbers of ZEVs to be available in the fall of 1997.

## QUESTIONS FROM CONGRESSMAN SHARP

Question 7: Integrated Resource Planning: The budget includes, both for EPAct implementation and for Climate Change Action Plan, expanded funding for DOE work to encourage Integrated Resource Planning (IRP). Both EPAct and CCAP look toward more competition to make the industry more efficient.

Many argue that competition and IRP are not compatible. We don't believe that to be the case, but is there a process the Department is engaging in to help resolve this seeming controversy and identify necessary steps to make IRP and competition complementary?

Answer: The Department is aware that some people are raising the argument that competition and IRP are not compatible. We believe that as competition increases, most states will have to modify their IRP process to make resource planning more flexible and responsive to time-sensitive opportunities posed to the utility. To assist states and the industry to meet the challenge of competition while maximizing energy-efficiency and conservation, the Department is organizing workshops that bring together state regulators, electric and gas utility managers, and other key stakeholders, in order to discuss each others viewpoints and determine what needs to be done to resolve various issues. The first such workshop was held on March 3, 1994 in Washington D.C. Other workshops are in the planning stages and the Department intends to conduct at least one workshop per quarter. In addition, the Oak Ridge National Laboratory is tasked with conducting a study that attempts to gain insight into what could be possible constructs of the electric utility industry (and the role of IRP) as we enter a new century. This report will be completed by the end of the year.

Question from Mike Kreidler to Secretary at March 8, 1994  
Hearing before House Energy and Commerce, Subcommittee  
on Energy and Power re: 95 Budget Proposal

Question 1: One budget issue I am very interested in as you know, is the Department of Energy's research system. I agree with your establishment of a task force to review spending and capacity at DOE laboratories. I introduced legislation which would reconfigure and close some DOE research facilities in order to reduce spending by 25%. I am wondering what impact you feel your task force might have in terms of reducing spending?

Answer: Thank you for your support of the Secretary of Energy Advisory Board's Task Force on Alternative Futures for the Department of Energy National Laboratories. As part of my charge to the independent Advisory Board Task Force, I have asked for an examination of alternative scenarios for future utilization of these laboratories for meeting national missions. Among the alternative scenarios that the Task Force plans to examine are options involving the possible redirection, conversion, and/or closure of elements of the DOE laboratory system. The Task Force also plans to identify the costs and benefits to the nation of alternative futures for the DOE multiprogram laboratories. An objective of the Task Force study is to examine several options for the future of the Department's major laboratories (based on an assessment of their roles and missions), in terms of budgets, management and mission assignments, including an analysis of possible costs and benefits of each alternative. While we should not prejudge either the outcome or their decisions on the areas where they will focus, it is worth noting that the Task Force is also considering establishing a working group on organization and management, including cost effectiveness. You may rest assured the Department will fully consider all recommendations of the Task Force on cost savings at the Department's laboratories. At the same time, it should be kept in mind that reviews are also underway of the Department of Defense and National Aeronautics and Space Administration's laboratories. The Administration will be looking at how government laboratories can most effectively be utilized in supporting current research and development missions and in helping to meet future national needs including economic security.



## QUESTIONS FROM CONGRESSMAN KREIDLER

Secretary of Energy Advisory Board Task Force on Alternative Futures for the Department of Energy National Laboratories

Question 2: Do you feel that your task force might consider other research facilities beyond the nine multi-program labs? Would you encourage the task force to do so?

Answer: The Task Force is considering in-depth the Department's nine multi-program laboratories plus the National Renewable Energy Laboratory in Golden, Colorado. The Task Force may consider the activities and programs at any of the Department's program-dedicated Laboratories and the Production Complex, as it develops its findings and recommendations.

Secretary of Energy Advisory Board Task Force on Alternative Futures for the Department of Energy National Laboratories

Question 3: How and when are those recommendations going to find their way into the budget and appropriations process?

Answer: The Task Force's report will be forwarded to the Secretary in February 1995. Its findings and recommendations may be included as part of the strategic planning and budget process for either fiscal year 1996 or fiscal year 1997, depending on when the release of the recommendations occurs during the budget preparation cycle.

## QUESTIONS FROM CONGRESSMAN KREIDLER

Natural Gas Fueled Railroads

Question 4: On another issue, I understand that the FY 1995 budget request includes increased funding for alternatively fueled vehicles. I have an interest in natural gas fueled railroads, and am wondering if this proposal would include additional research into this area?

Answer: The FY 1995 budget request includes support for a program to develop an optimized locomotive engine to run on liquefied natural gas. This four-year program started in FY 1994 and is being co-funded by the Department of Energy, General Motors Corporation, Gas Research Institute (GRI), California's South Coast Air Quality Management District (SCAQMD), Southern California Gas Company, Southern California Regional Rail Authority, and Union Pacific Railroad. The overall objective of this project is to develop and demonstrate natural gas locomotives that provide significant advantages over today's diesel locomotives in terms of exhaust emissions and operating costs. More specifically, a 75 percent reduction in NO<sub>x</sub> emissions, compared with baseline diesel locomotives, will be demonstrated using the combustion system with the most favorable trade-offs between power output, fuel economy, and exhaust emissions.

Question from Congressman Mike Kreidler

Mr. Kreidler. Being from Washington State, I am very interested in the Bonneville Power Administration budget. Will this budget be affected, either in terms of outlays or process, if Bonneville becomes a government corporation?

Mrs. O'leary. As part of its competitive reinvention effort, the Bonneville Power Administration is exploring the potential of becoming a government corporation. As envisioned by Bonneville, corporation status would not change relationships between Bonneville and the Congress, the Northwest Public Power Planning Council, Bonneville customers or the public. Bonneville would submit a business-type budget to Congress, and would be subject to the same authorization and appropriation committee oversight as it experiences today.

While not affecting congressional oversight, or Bonneville's basic statutory mission, government corporation status would make a significant contribution in the changes Bonneville is initiating towards greater efficiency and competitiveness. Bonneville envisions significant dollar and FTE savings from removing requirements that impede efficient provision of Federal power marketing, transmission, and other services.

Question 6: Another Washington issue for which I would like an answer for the record is whether the budget includes continued funding for the Hanford Health Information Network. I understand that this program is supposed to sunset in 1994 and am wondering what the status is on continued DOE funding should it be reauthorized.

Answer: The FY 1995 budget does not include funding for the Hanford Health Information Network. The original grant was for \$5 million to be administered over the period of time from 1991 through 1994. The states of Washington, Oregon, and Idaho have submitted a proposal to the Secretary of Energy to extend the Hanford Health Information Network for an additional three years. The Department is in the process of evaluating the proposal. If it is decided to extend the grant, the funding would have to come from the Department's existing FY 1995 Congressional request.

#### Hanford

Question 7: Also regarding the Hanford facility, I understand that part of the now (sic) Tri-Party Agreement is to allow the state to play more of a role in developing DOE's budget recommendations and to allow the state more access to budget information generally. Will other groups, such as those involved in the Hanford Advisory Board, also have access to that information in a timely manner?

Answer: The public and stakeholders, including members of the Hanford Advisory Board, will be informed and involved at key stages of budget formulation and execution. This involvement will allow the department to discuss stakeholders values/priorities, and to show the stakeholders how these values/priorities are reflected in the Department's budget planning execution.

Regulators from states and the U.S. Environmental Protection Agency will now be much more involved in the development of Environmental Management work scope, priorities, schedules/milestones, and budgets.

This process is already being followed under the cleanup agreement developed for the Hanford site in the State of Washington and reinforces DOE's firm commitment to developing with the State and EPA.



## QUESTIONS FROM CONGRESSMAN BILIRAKIS

Pinellas Plant

Question 1a: The proposed FY '95 budget for the Pinellas Plant allocates only \$25 million for Stockpile Support, down from \$84 million appropriated last year. Although the Plant has been scheduled for closure or private sector conversion, this funding decrease would greatly accelerate that process. Please explain why the Department has decided to drastically decrease this funding and thereby accelerate the shut-down of the Plant by nearly a year.

Answer: Within the total Defense Programs funding allocation and priorities for FY 1995, the Department was unable to continue nonnuclear production operations at Pinellas, Mound, and Rocky Flats through FY 1995 as we had originally planned. The \$25 million allocation for Pinellas is intended to cover costs associated with production shutdown and transition/transfer costs in FY 1995.

Pinellas Plant

Question 1b: We understand that the budget may be revised to reflect additional funding. Please advise how much additional funding might be included in this revision, the source of this funding reallocation and the impact this might have on the scheduled shut-down or conversion of the plant.

Answer: Because the \$25 million may not be sufficient to fully cover the costs associated with shutdown of the production mission, the Department is studying possible alternatives to increase the funding level. While this would not change our plan to terminate the production mission at the end of FY 1994, it would allow us to increase the production output of the plant during FY 1994, thus meeting more of our Stockpile Support requirements.

## QUESTIONS FROM CONGRESSMAN BILIRAKIS

Pinellas Plant

Question 2a: Due to the possible premature decrease in Stockpile Support funding, it has been estimated that approximately 500 of 1,140 employees at the Plant will face layoffs or early retirement one year ahead of schedule. Has the Department considered the impact of such a massive job loss on the surrounding communities?

Answer: The Department is exploring alternatives to ease the budgetary impact on Pinellas and to provide additional time for the workers and communities to help plan their economic conversion. However, this would only delay the job loss that must occur over the next two years. In consideration of the impact of the job loss on the Pinellas workers and their communities, the Department is planning a comprehensive economic adjustment program. Pursuant to section 3161 of the National Defense Authorization Act for Fiscal Year 1993, the Department has been consulting with stakeholders at the plant and in the surrounding communities on the development of a Work Force Restructuring Plan and an Economic Development Plan aimed at mitigating the impact of the job loss and related declining economic activity on the Pinellas workers and communities.

## QUESTIONS FROM CONGRESSMAN BILIRAKIS

Pinellas Plant

Question 2b: Has the Department done anything to help mitigate the impact of such enormous layoffs on the surrounding communities?

Answer: The Department has been working proactively with the Pinellas communities to mitigate the impact of the layoffs. The Department helped to establish the community-based Tampa Bay Defense Transition Task Force and provided that task force with \$500,000 to develop an economic conversion strategy and detailed economic development plan.

The Department authorized \$5M as an initial investment to stimulate economic development and will be supporting other initiatives that will be defined in the economic development plan. The Department is coordinating with the Department of Defense to obtain the following funding identified in the National Defense Authorization Act for Fiscal Year 1994 to assist the economic conversion of Pinellas: \$10M for technology deployment centers, and \$6M to replace manufacturing equipment scheduled for shipment to other sites.

The Department is consulting with the workers and communities on the development of a work force restructuring plan which will provide separation pay, retraining and other transition and outplacement support for affected workers. The plan has not yet been submitted for Headquarters approval; however, in response to stakeholder requests, the Department authorized

\$1.5M for retraining initiatives in the draft plan that were needed to support the overall schedule for defense conversion. The worker support initiatives in the plan will also help mitigate the impact of the loss of the jobs on the communities since the workers will be better able to sustain themselves during a period after their jobs terminate, and ultimately to transition to new jobs. Moreover, the Department has established criteria for approval of economic development proposals such as those in preparation by the Tampa Bay Defense Transition Task Force, that encourage projects with a high potential to reemploy our displaced workers. Consistent with these criteria, the Department is seeking to establish large anchor tenants at Pinellas who can begin reimbursing the Government to use our facilities while also employing our former defense workers. On March 31st, the Department negotiated a contract modification with our Management and Operating Contractor, Martin-Marietta Specialty Components, allowing it to use facilities and equipment at the site for work outside the contract scope, potentially making it our first anchor tenant.

## QUESTIONS FROM CONGRESSMAN BILIRAKIS

Pinellas Plant

Question 3a: In the FY '95 budget, the Department places a great deal of emphasis on promoting industrial competitiveness activities. The original plans to end production at the Plant by September 1995 envisioned ambitious conversion efforts. What impact would accelerating shut-down by one year have on the possibility for successful private sector conversion and on the number of technologies and jobs that are likely to transfer to the community?

Answer: Accelerated closure of the Pinellas Plant may have an impact on defense conversion activities. It will require expeditious implementation of local efforts to develop non-defense uses for existing skills and facilities. It is for this reason that the Department authorized early approval of \$5 million of economic development planning and program funds. To date, a number of different organizations along with Pinellas community leaders have worked together to draft a long range economic development plan. The Department has already approved and funded portions of this plan which includes economic development programs to be managed by the Tampa Bay Enterprise Corporation, a non-profit economic development organization.

Pinellas Plant

Question 3b: What impact would this shut-down have on existing technology transfer contracts at the Plant?

Answer: There would be no adverse impact on existing technology transfer contracts at the Pinellas Plant. All technology transfer projects were structured by DOE and the M&O contractor, Martin Marietta Specialty Components, to anticipate downsizing of the Pinellas Plant.



Pinellas Plant

Question 3c: The Pinellas Plant has been identified as having great potential for effective transfer of defense technology. Would the accelerated shut-down schedule inhibit private sector conversion of the Plant?

Answer: The Tampa Bay Defense Transition Task Force and other stakeholders have notified the Department of their concern that an accelerated shutdown will impact the schedule of their current economic conversion plan. The Department is currently examining budget alternatives that would also relieve these schedule impacts. However, while the in-process plans for worker and community transition and economic conversion could use all of the time that is available, we believe that the impacts of the accelerated shut-down schedule will not inhibit economic conversion and could be off-set by successful implementation of key short-term milestones in the economic development plan. Therefore, the Department will be making every effort possible to facilitate such success. In that regard, on March 31st the Department negotiated a contract modification with our Management and Operating Contractor, Martin-Marietta Specialty Components, allowing it to use facilities and equipment at the site for work outside the contract scope, potentially making it our first anchor tenant.

Pinellas Plant

Question 4: How would the reduction in funding affect the ability of the Department and the Plant to comply with all applicable environmental laws and safety requirements that the Plant undergoes through decontamination and decommissioning activities?

Answer: It is not the intent of the Department to affect the Plant's ability to comply with all applicable environmental laws and safety requirements as a result of the FY 1995 budget request. Due to concerns that the request may not be sufficient to cover the costs associated with shutdown, the Department is studying possible alternatives to increase the funding level.

## Question for the Record

OFFICE OF THE SECRETARY

Question 1: Isn't it true that the Administration's Fiscal Year 1995 Budget Request proposes to increase the amount spent on the Office of the Secretary, your office, by 19.6 per cent? Please explain this huge increase in the budget of the Office of the Secretary.

Answer: There is an anomaly which gives the appearance of a \$560,000 increase from the FY 1994 appropriation to the FY 1995 request. When the FY 1994 appropriation is adjusted to include use of \$302,862 in prior year unobligated balances to fund the current average salary, staffing mix, the full effect of the FY 1993 pay raise, and the FY 1994 locality pay increase, the real increase in FY 1995 over the FY 1994 operating level is \$257,138. This increase is associated with the full effect of the FY 1994 and the FY 1995 locality pay increases, the FY 1995 pay raise, and travel requirements to maintain the level of travel initiatives previously undertaken.

## REPUBLICAN QUESTIONS FOR THE RECORD

Nuclear Waste Revolving Fund

Question 1: With respect to site characterization activities at Yucca Mountain, the Department will soon take delivery of its tunnel boring machine and will be ready to begin tunnelling in a matter of months, subject only to the availability of funds. To that end, the Department's fiscal year '95 budget includes an increase in funding for the Office of Civilian Radioactive Waste Management as well as a proposal to ensure that the fund will continue to be available to the program. However, the Administration's legislative proposal "recognizes that the proposal does not contain the new mandatory savings needed to offset the additional direct spending for this program."

- a. How important is the proposed increase in spending?
- b. What "sources of savings" does the Department recommend to offset the spending for FY '95?

Answer (a): The funding increase requested by the Department for fiscal year 1995 and beyond is extremely important. However, the question implies that the increase is needed for initiation of tunnel boring machine operations. This is not the case, as such operations are scheduled to begin in this fiscal year. The increased funding is being requested to enable the Department to continue construction of testing facilities above and below ground in order to make a timely finding of suitability.

The increased funding would allow the Department to focus the program on: (1) development of multi-purpose canisters for interim storage, (2) early evaluation of technical site suitability for Yucca Mountain, (3) activities supporting the National Environmental Policy Act process and site

recommendation, and (4) preparation of the license application, if the site is suitable.

Alternatively, should the program fail to secure the increased level in funding proposed, significant restructuring of activities at Yucca Mountain will be required. Initial focus will be given to site suitability activities while deferring work required for the license application. While underground testing will be pursued within budget constraints, surface-based testing will be greatly reduced. Under these circumstances, site characterization would not be completed before 2004 (as opposed to 2001 for the Administration's Funding Proposal), and submission of the license application would not occur until well into the next decade. Total expenditures through submission of the license application are estimated to be \$8.4 billion if the current funding profile is continued, as contrasted with \$4.8 billion for the Administration's Funding Proposal.

Answer (b): As you indicate, the proposal does not contain new mandatory savings. The proposal does require a review of the lease between the U.S. Enrichment Corporation and the Department covering the uranium enrichment plants operated by the Corporation for possible sources of savings. Upon completion of this review, if appropriate, the Administration will propose new legislation with specific new mandatory savings to offset the additional funding needed for the Department's high-level radioactive waste program.

## REPUBLICAN QUESTIONS FOR THE RECORD

Nuclear Waste Revolving Fund

Question 2: We are all concerned that the Department spend any money received from the new funding mechanism wisely. However, there are already a number of entities that provide oversight of this program, including:

- your independent financial management review panel,
  - the Nuclear Waste Technical Review Board,
  - the General Accounting Office,
  - this Committee, and others in Congress, and
  - the State of Nevada (which, incidentally, is funded through the Nuclear Waste Fund).
- a. Do you believe that the nuclear waste program needs additional oversight?
- b. One of the reasons for growing confidence in this program has been your personal recognition of its importance. Will this continue?

Answer (a): There are probably few, if any, Federal programs that are currently subject to more oversight than this one. At this time, the Civilian Radioactive Waste Management Program is currently undergoing substantive external and internal evaluation under my direction. As you noted, in addition to the independent financial management review panel, the Nuclear Waste Technical Review Board, General Accounting Office, four Congressional Committees, and the State of Nevada, the following groups also oversee and review the whole or significant elements of the Civilian Radioactive Waste Management Program:

- the Nuclear Regulatory Commission, including the Commission's technical staff, and Advisory Committee on Nuclear Waste;



- Other Federal entities, including the Departments of Transportation and the Interior, the Environmental Protection Agency, the Secretary of Energy Advisory Board, the Office of Management and Budget, and the Office of Technology Assessment;
- the National Academy of Sciences' Board on Radioactive Waste Management; and,
- Nine affected units of local government within the State of Nevada and one affected unit of government within the State of California.

Adding additional oversight and review of radioactive waste management issues should be carefully considered within the context of the ongoing work and existing oversight. The only way to achieve success is to continue the progress which is being made, and the introduction of further uncertainties or delays in the ongoing work would be counterproductive. Any additional oversight activities that may be undertaken should not impede this progress.

Answer (b): Yes, I believe that the long-term management of radioactive material is a great responsibility of the Federal Government for the benefit of society. The Nation's radioactive waste management strategy must consistently protect the health and safety of the public at large and workers who handle radioactive materials and, at the same time, it must control

the environmental consequences of the handling, storage, and disposal activities. There is a growing national awareness that we must find solutions to the radioactive waste problem. Failure to do so could eventually threaten the Nation's supply of electric power, 20 percent of which is generated by commercial nuclear plants. Furthermore, the safe and permanent disposal of high-level radioactive waste resulting from the cleanup of the Nation's defense-related activities presents a challenge comparable in magnitude and complexity to the commercial nuclear waste issue.

I remain convinced that we can provide the leadership to find these solutions. The Program is reaching out to the many individuals who have their own views on how radioactive waste should be managed and how the Program should conduct its activities, and we have begun to integrate these views into the Program. No one individual can solve this problem--the technical and policy issues are too complex. But we will listen, and work collaboratively, with as many knowledgeable people as we can to improve the trust and confidence in this Program. I believe that we are making progress, and as long as I am Secretary, I will continue my efforts to ensure this progress.

## REPUBLICAN QUESTIONS FOR THE RECORD

Productivity Savings

Question 1: The Fiscal Year 1995 Budget Request for Defense Environmental Restoration and Waste Management assumes savings of almost 300 million dollars from improved productivity. What examples of productivity savings has the Office of Environmental Restoration and Waste Management identified that justify an assumption of those kinds of savings?

Answer: The Environmental Management (EM) line organizations have been challenged to achieve a 5% savings in the FY 1995 program. For each program, the projected productivity savings are as follows: Waste Management \$160.8 million; Environmental Restoration \$133.9 million; Facility Transition \$5.0 million.

EM expects to achieve these savings by increasing efficiency, reducing overhead and indirect costs and by converting certain contractor positions to Federal employees. Field offices can achieve these savings by:

- using fixed-price competitive bid contracting instead of cost plus a fee
- reducing indirect/overhead costs
- privatizing in house activities, where appropriate
- reducing project management costs.

EM currently has a major effort underway to allocate 850 Federal positions among operations offices managing EM work. Each office was required to "bid" on positions by identifying cost savings and increased performance that would be achieved with additional Federal employees.

## REPUBLICAN QUESTIONS FOR THE RECORD

Uranium Enrichment Decontamination and Decommissioning Fund

Question 1: According to the Energy Policy Act of 1992, the Decontamination and Decommissioning Fund was established for the "exclusive purpose" of remediation and decontamination of the DOE's uranium enrichment facilities. In the FY 94 and 95 Budget Requests nearly \$45 million (\$19.5 million in FY 94 and \$24 million in FY 95) is requested for landlord activities related to the leasing of the K-25 uranium enrichment building at DOE's Oak Ridge facility. Please explain how landlord activities constitute decontamination and decommissioning?

Answer: The Landlord activities at the K-25 Gaseous Diffusion Plant predominantly support the decontamination and decommissioning and remedial activities funded by the Decontamination and Decommissioning Fund. In 1993, the Office of Management and Budget agreed that the importance of landlord services in supporting decontamination and decommissioning activities at the K-2 site made it appropriate for the D&D Fund to absorb a pro-rata share of such services. Without landlord support for the Decontamination and Decommissioning Fund activities, numerous approved milestones cannot be achieved. Savings of approximately \$450 million is expected to be achieved through FY 1995 and FY 1996.

## REPUBLICAN QUESTIONS FOR THE RECORD

Spent Fuel Acceptance:

Question 3: Although the Department has not conceded that it has a contractual or legal obligation to begin accepting spent fuel from utilities in 1998, you have been quoted several times as saying that you have a "Moral obligation" to do so. However, in your recent Program Guidance to the Office of Civilian Radioactive Waste Management Director Dan Dreyfus, there is an emphasis placed on providing compensation to utilities for the Department's failure to meet that deadline. It will be appropriate to compensate utilities that are stuck with on-site storage costs past the 1998 deadline. However, the Department must also take physical possession of that waste at some point. What preparations is the Department undertaking to begin accepting spent fuel from utilities on a timely basis?

Answer: Issues related to at-reactor storage are now coming to the forefront of public attention. Although reactor sites can safely store waste for an extended period of time using technologies that are available in the marketplace, there are economic and policy concerns arising from long-term at-reactor storage. I am firmly committed, with stakeholders, to identify solutions to one of the most challenging issues of our time: the management of radioactive waste. The Department is proceeding with several initiatives to resolve near-term waste management issues.

One such initiative is the development of a standardized multipurpose canister system to support spent nuclear fuel transportation, storage, and disposal. I believe that the standardization of on-site storage technology, represented



by the multipurpose canister system, has the potential for offering considerable cost savings for utilities and the Federal waste management system. It would also introduce efficiencies into the system that would otherwise not be realized.

The Department will continue to work closely with its stakeholders, including the National Association of Regulatory Utility Commissioners, as it identifies and develops constructive recommendations for interim spent nuclear fuel storage alternatives through a collaborative dialogue. Participants in this dialogue represent a broad range of affected interests, including state utility regulators, nuclear utility executives, environmental groups, and representatives from the State of Nevada. This group recently issued a report on spent fuel management and we are currently reviewing their recommendations.

We continue to believe that timely Federal waste acceptance and away-from-reactor storage is the preferred approach to address the waste management issues confronting the Nation. We continue to support the efforts of the Nuclear Waste Negotiator to find a host site for a Federal storage facility. However, we do not have a voluntary host for such a facility and the Department does not have the legislative authority to use monies from the Nuclear Waste Fund to site

a Federal storage facility independent of the repository schedule. Absent such a facility, I believe that the Department should consider other means to share the financial burden associated with the continued at-reactor storage of spent fuel after 1998. I have directed Dr. Dreyfus to initiate an effort to evaluate cost sharing options as part of this broader approach to resolving near-term waste management issues. Any form of cost sharing offered through the Nuclear Waste Fund is not intended to fulfill the Department's ultimate obligation to take title to and physical possession of spent nuclear fuel once a facility constructed under the Nuclear Waste Policy Act is operational.

I believe that the approach described above will permit the Department to begin accepting spent fuel from utilities on a timely basis once a site becomes available.

## REPUBLICAN QUESTIONS FOR THE RECORD

Spent Fuel Storage Facility

Question 4: Last year, the Department released a press statement entitled "Secretary Announces Redirection of Civilian Radioactive Waste Management Program," in which, among other things, you announced that the Department intended to consider federal interim storage as a means to meet its obligations to begin accepting spent fuel from utilities. Recently, the National Association of Regulatory Commissioners recommended the Department consider federal interim storage options.

(a) What are the benefits of central storage of spent fuel to utilities, neighbors of nuclear energy plants, and ratepayers?

(b) Would federal interim storage provide a means for the Department to begin to centrally manage spent nuclear fuel in the near future?

Answer (a): Central storage of spent nuclear fuel would provide benefits to utilities, ratepayers, and the general public. Without an interim storage facility in place, much of the spent fuel will have to remain on reactor sites until the middle of the next century, thus requiring the utilities to keep their facilities manned and maintained for some period of time after the reactors have ceased producing electricity. Centralized spent fuel storage at a Federal interim facility will reduce the amounts utilities otherwise would have to pay for extended on-site spent fuel storage at reactor sites. The Edison Electric Institute has estimated this averted cost to be between \$8 to \$25 million per year per reactor. Reduced costs to utilities, through the use of Federal interim storage, translate directly into savings on utility bills for ratepayers. Moreover, removal of spent

fuel from the reactor sites will allow for the orderly dismantlement of reactor facilities and the timely restoration of their sites.

Answer (b): Identification of a Federal interim storage site now would allow the Federal Government to begin centralized management of the Nation's spent fuel at a facility early in the next century, well ahead of anticipated repository operations. However, the Department does not have the authority to site a centralized interim storage facility independent of the repository schedule.

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